Issue 28 July 2019

The Spekboom

Charlie appointed to the NFAC

At the end of 2018 Charlie Shackleton was appointed to the National Forestry Advisory Council (NFAC) for a three year term. This is a statutory council set to advise the minister of Agriculture, Forestry & Fisheries on all aspects relating to indigenous forests, plantations and woodlands in the country. The NFAC meets four times per year with senior staff of the ministry and at times the minister, and they provide an annual report to the minister on what they deem should be priority areas for his/her attention and for policy consideration in terms of issues and initiatives relating to forests and woodlands.

Charlie was appointed on the basis of his longstanding and interdisciplinary expertise in many facets of forests and woodlands in South Africa, but with a specific emphasis on urban forests, non-timber forest products and poor communities use and reliance on forest resources. The role of the NFAC may become particularly important with the recent appointment of a new minister in the position who will need to rapidly achieve a critical and considered understanding of the various issues facing the forests, plantations and woodlands and communities' subsistence and commercial use of them.



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Eco-brick prize winner

The third year class of Enviro Science, led by class reps Xander Gowar & Zahra Abdulrahim, embarked on an eco-brick making competition, with the prize for the most eco-bricks filled being a pizza voucher. The winner was Rebecca Farquharson, with the total number of eco-bricks collected amounting to 19.

An eco-brick is a reusable building block created by packing clean and dry, used soft plastic into a plastic bottle to a set density. Eco-bricks enable us to take personal responsibility for our



plastic use. Around the world, people are using these to build in a whole new way, from indoor furniture to structures in gardens and parks. Click here for more information on eco-bricks



The Africity Project: Adila Eugenia

I am Ádila Eugênia, a 26 year old Brazilian currently living in the city of Nuremberg in Germany. I am studying at Friedrich Alexander University, the master's programme in Cultural Geography. I chose to study geography because I believed that this would not only give me good trips, but a more critical worldview. I believe that when we travel, we acquire a new perspective on life, and in our profession we learn that the world is too diverse to hold values that do not allow us to evolve as a society.

Geography brought me to Grahamstown. where I am part of the "Africity" project, a partnership between the Enviro Science dept Rhodes and the Friedrich Alexander University Geography Institute. This project aims to teach, train and learn from researchers who are dedicated to explore the causes and effects of climate change and natural resource use in cities in sub-Saharan Africa.

When I arrived in Grahamstown, I came across the water shortage situation. I visited different parts of the city and, just like in my homeland, I noticed that social inequality is very large and that, unfortunately, the less favored classes are the ones who, in times of global warming, suffer the most from its outcomes.

For me, both visiting Grahamstown and living there for three weeks, was one of the most amazing experiences of my life. Having the opportunity to study at a well-respected University in South Africa, being able to listen to researchers' debates and to exchange knowledge, has been undoubtedly enriching for my personal and professional life. Related to my master's thesis, intend to achieve throughout the Africa Project relevant scientific results about reducing the risk and social vulnerability of cities like Grahamstown.

"Travelling allows us to acquire new perspectives on life and to learn that the world is too diverse to hold values that do not allow us to evolve as a society"

Ecoscribes close the week with Writathon win

Yondela Norman

The Rhodes University Centre for Postgraduate Studies (CPGS) has been organizing events at a fever pitch this past term, culminating in an 8-hour Writathon on Friday 24th May. The Writathon took place in the Margaret Kenyon Reading Room (Library; Level 3) and all postgrads were invited to participate in four-person teams for productivity and prizes. Each team member was required to work a two-hour stint whereby they could write about anything during that time (be it a poem, short piece or thesis draft). Each twohour stint was broken down into four 25-minute

sessions with four 5-minute breaks in what is known as the Pomodoro technique.

In response to this fun challenge, the DES Postgrads excitedly entered themselves into the competition, representing the Department with spekboom cuttings for props and an apt team name: EcoScribes. The team consisted of Afika Njwaxu, Buhle Francis, Mallika Sareshpande and Yondela Masande Norman. The venue was packed with eager postgrads and the atmosphere was one of both competition and camaraderie, with everyone drawing motivation from one another.

After a well-spent 8 hours (with some of the team members putting in extra time), the EcoScribes were rewarded for completing the Writathon as well as for coming up with a creative theme. The prizes ultimately amounted to a R400 Rat and Parrot voucher (split evenly, of course) and a 16G CPGS Memory Stick for each team member. The Writathon was a great way to end the term and the dinner at the Rat an awesome way to start the weekend (the thrill of victory made the pizza taste that much better).

Nelisa Mpama: Life as a Conservation facilitator

After graduating with my Masters from Rhodes University in the department of Environmental Science in April 2017, I have hung up my name tag. Since then, I have happily been working for Conservation Outcomes as a Conservation Facilitator intern. In my current position I facilitate biodiversity conservation on private land and state-owned land with important biodiversity or critical ecological infrastructure. Also facilitating the negotiation of stewardship agreements and assisting with developing management plans for Protected Areas. I am also working with conservation entities to improve and enhance biodiversity conservation and assist Eastern Cape Parks & Tourism Agency (ECPTA) in declaring new Protected Areas among the Kouga and Kou-Kamma regions of the Eastern Cape. The nature of my background and studies has prepared me for this position. My current working environment has

helped me grow in the field of Environmental management and Nature conservation. With the work that I am involved in currently I interact with people at all levels to further the subject of environmental management and the importance of sustainable environmental management practices. I have found this subject very stimulating and interesting to myself thus I enjoy living it and sharing it with other people.



Ecoscribes contd...



WHAT IS THE POMODORO TECHNIQUE?

A time management method devised by Francesco Cirillo in the 1980's, it uses a timer to divide work into manageable time intervals of 25 minutes, followed by a 5minute break. Each interval is known as a pomodoro (Italian for 'tomato'), named after the tomato-shaped kitchen timer that Cirillo used for this technique during his days as a university student.

The main aim of this method is to minimize interruptions and their impact on focus; thereby maximizing productivity in relatively short time frames.



"Download the Litterati

App

Litterati is an app that

tracks the amount of

litter you pick up. Just

take an in-app picture of

the litter you collected,

tag it, and upload it to

the Litterati digital

landfill! Litterati is a great

app that will motivate

you to continue to pick

up litter and do good for

the Earth. "

By Afika Njwaxu Elandrie Davoren.

A group of postgrads from the Department of Environmental Science convened on Sunday, July 21, to clean the area around the Springs. The Springs is where Makhanda locals collect their water. It is located approximately 3 km out of town on the Port Alfred road.

recent years the Springs has become a dumping area. We, as a Department, decided something needed to be done. We left the Department at 11h30 and went to work. We took one pack of 20 trash bags up to the Springs and in no time filled all of them, because the situation was worse than we anticipated. One member of our



Clean up at the Springs

went to get more bags and soon 7 more bags were filled up. We found trash bags that had been there for such a long time that grass has grown over it. Some of the bags were buried so deep that we were unable to remove them. After a few hours of work we realised we need to return since there was still a lot that needed to be done.

As a group we debated a number of different solutions that could be used to solve the problem. Everything from signs declaring "No Dumping" to big municipal garbage bins was discussed. It is, however, the responsibility of all Makhanda residents to keep our water source and the area around it clean.

Littering is an everincreasing worldwide problem. The well-being of people, animals, and the environment is compromised by litter. People can become injured by items such as broken glass and are susceptible to disease caused by unsanitary conditions. Ani-

mals are at risk to ingest garbage and become trapped and debilitated by waste. The environment becomes



threatened when litter invades natural habitats and when toxic chemicals from items, such as plastic, seep into soil and groundwater.

It takes a long time for litter to break down. An item that is commonly irresponsibly disposed of, the plastic bottle, can take up to 450 years to degrade. Not too far behind, an aluminum can takes an average of 80-200 years to break down. These are just two of the many items that cause harm if they are responsibly not posed of.



Leafy suburb comes to dusty Extension 10



Story by Nanamhla Gwedla

"We are planting trees so that we too have leafy suburbs that look like those closer to town and so that we can breathe fresh, clean air"

Rhodes Doctoral candidate and keen environmentalist Nanamhla Gwedla has embarked on a study that seeks to investigate the barriers to, and possible enablers of tree planting in the Low Cost Housing/RDP suburbs of Grahamstown. Gwedla is a PhD student in the Department of Environmental Science, under the supervision of Professor Charlie Shackleton, and Dr Lausanne Olvitt from the Environmental Learning Research Centre. The vision of the project is to ultimately design and test a community-driven tree planting initiative specifically for LCH areas that will empower community members to prioritise tree planting, especially in their private spaces.

Over the last year, Gwedla has been chairing focus group discussions with communities from LCH areas in three different towns around the Eastern Cape, including Grahamstown. Residents from the newly developed Extension 10 in Grahamstown participated in discussions which at the Assumption Development Centre in Joza.

Both as an outcome of the study and a community engagement initiative, the group of excited community members embarked on a public tree planting event targeting one of the day-care centre in the area on, 22 May. The trees planted at this centre were donated by the Makana Municipality Parks and Recreation Department; and they included Olea africana (wild olive, umnguma, olienhout) and the *Harpephyllum* caffrum (wild plum, umgwenya, wildepruim). The Makana Community Works Programme (CWP) assisted with tools for planting.

The event began with a general talk by the group to the teachers and the children about the importance of having trees and encouraging them to protect and look after the trees after they had been planted. The Green Champs, as the group of community members are known, demonstrated a great deal of pride in being part of such a momentous activity, even going as far as naming

the individual trees. Some of the trees were donated to group members whose households were fenced off (as a precaution against wandering cattle and donkeys), and who were also keen to look after those trees.

The community members said they were planting trees to ensure that "we too have leafy suburbs that look like those closer to town and so that we can breathe fresh clean air."

The project is a pilot for an even bigger event planned as part of the 2018 Arbor Week celebrations. The initiative of celebrating Arbor Week was a suggestion from the group as part of efforts to revive the culture of tree planting in Grahamstown.

Many members reminisced about Grahamstown's glory as the "greenest city" in the Eastern Cape. The community members said they would like such honours to extend to the township too. Support and partnership with the Umthathi Training Project in Grahamstown have been one of the major milestones of the project, driven by the community members to ensure that the Arbor Week is a success.



Story by Sheunesu Ruwanza

The 2nd South Africa - Sweden University Research and Innovation Forum (SASUF) was attended by Dr. Sheunesu Ruwanza, and Prof. James Gambiza, SASUF aims to strengthen ties South Africa between and Sweden in research. education and innovation. The main SASUF research seminar was conducted from the 8th to the 10th of May 2019 at Stellenbosch University in South Africa.

The main event was attended by close to 400 university researchers who presented their research work under six themes which are based on the United Nations Sustain-able Development Goals. The themes are, (i) climate change, natural resources and sustainability, (ii) education for a sustainable society, (iii) social transformation through change: knowledge and social devel-opment strategies for society, (iv) understanding the burden of disease in Sweden and Staff attend the SASUF Forum

South Africa and its impact on the health systems of the two countries in the future, (v) sustainable urbanisation, travel and tourism in the 21st Century, and (vi) digital technologies, big data and cybersecurity. Prior the main event activities various workshops were conducted between the 6th and 7th of May 2019. These workshops aimed to gather researchers with similar interests who presented their research work and discuss potential future collaboration between South African and Swedish Universities.

The theme on climate change, natural resources and sustainability that Dr. Ruwanza participated in created an ideal platform for him to present his work to international researchers and scientists who are experts in the area. Dr. Ruwanza presented his research work entitled from natural to degraded ecosystems and back again. In this presentation he talked about how degraded ecological systems that are subjected to ecological restoration can revert to novel degraded system if they are not well monimanaged and tored. Dr. Sheunesu Ruwanza's presentation was received successfully by academic researchers and experts. The presentation was conducted on Thursday 9 May 2019 between 11h50 and 12h05. It

was under the subtheme biotechnology and restoration which was chaired by Prof Ntebogeng Mokgalaka and approximately 25 researchers attended Dr. Ruwanza's presentation session.

Specific benefits of attending the SASUF workshop and main event include: -

Development of a research collaborative group whose theme is on *people* and ecosystems at risk.

The oral paper presentation by Dr. Sheunesu Ruwanza facilitated collaborative engagement between various researchers.

Both the SASUF workshop and main event were excellent opportunities to gather divergent ecological views, interact and exchange my findings with other scholars.

"Of interest was the discussion by scholars regarding linkages between restoration ecology at a micro scale and its applicability at a macro scale."

Sharing & rehab strategies with the Macubeni community

Story by Monde Duma.

Macubeni is known for its degraded landscape which results from climate change and poorly executed sustainable land management practices. To ameliorate the situation, the GEF5 Sustainable Land Management (SLM) Project has partnered a research team from the Department of **Environmental Science** (DES), led by Professor James Gambiza, and the community of Machubeni. Only FIVE of the 14 villages are participating in the exploratory phase, namely, Boomplaas, Gxojeni, Helushe, Platkop and Qoboshane.

Realising the extent of land degradation, in the form of extensive erosion, and vegetation degradation, one of the key strategies adopted is to institute low-cost land rehabilitation strategies. A few low-cost and easy to execute land rehabilitation techniques were chosen as follows:

Stone packing - use locally abundant stones in the construction erosion control structures to arrest the progression of gullies and rills and promote infiltration and trap organic material.

Brush packing traps - using branches of the *lapesi* as a protective cover, crusted soil is broken down to allow grass seeds to germinate

Brush silt traps - use *lapesi* branches to construct silt traps to facilitate penetration of water into the soil and improve moisture retention, sedimentation, trapping of seeds and accumulation of organic material.

Water ponding - ponding are is used to trap moisture, seeds, sediment and organic material to create a conducive environment for regrowth of vegetation (grasses).

Peer and experiential

learning are used as a strategy to exchange knowledge and information between the research team, the participating community members and their peers elsewhere who are also involved in similar projects.



Community members being taught by a peer on how to construct a stone pack to arrest headward erosion



Community members after completing a stone packing exercise to arrest headward gully erosion



Community members trained to construct bush silt traps

Science Soccer matches

Yondela Masande Norman & Elandrie Davoren

The Department of Zoology and Entomology (DZE) organized a friendly football match with the Department of Environmental Science (DES) on Saturday 8th of June. All were invited and encouraged to join in on the fun, be it through playing on the field or providing moral support from the sidelines.

mental culture.

The match saw students and lecturers alike put up an impressive display of teamwork, skill and fitness, adding to not only the fun but to the competitiveness of the game as well. The match was initially supposed to last an hour (1 half=30 minutes) but everyone got so caught up in the vibe that we ended up playing for about twice as long.



The match venue was initially King's Field for 10:30-11:30am, but the awkward situation of the field not having any goalposts prompted everyone to shift to Prospect Fields instead. The arrival of the DES team at the new venue was greeted with a fully kitted out DZE team, a clear indicator of how integral weekend activities are to the depart-

Although the match ended 6-2 in favor of the DZE, it was-from my personal point of view-incredible fun being able to play alongside colleagues from the DES and a great way to get to know each other better. I strongly recommend that DES, as well as other departments and faculties in the University, to continue taking part and organizing



events such as this match. I believe activities such as these not only exercise the body and help with destressing after a long week, but they also contribute to fostering a culture of active participation and, ultimately, togetherness.

SA second match took place on Sat 13th July with six departments from the Science faculty. The first games were between Environmental science department and a combined team of microbiology and ichthyology which was referred to as Cycrops. On the adjacent field Zoology was who played against a combined team of Chemistry and Biochemistry. On the first round, Envidrew against ros whereas Cycrops Chem/Biochem won against Zoology. The second round games was Enviros vs Zoology and Cycrops against Chem/ Biochem. Unfortunately, Enviros lost by one point against Zoology and Cycrops played

draw. The third round of games (the semi-finals) **Environs** playing was Chem/Biochem and Zoology against Cycrops. The game between Enviros and Chem/Biochem ended in a draw while Zoology won against Cycrops. The finals resembled the first round in terms of teams. Environmental science department played Cycrops Zoology and played against Chem/ Biochem. Enviros against Cycrops ended in a draw.

brightened Elandrie everyone's day by bring up some fruits (bananas and oranges) which was meant to help fuel the players but the cheerleaders could not help themselves but to also indulge. This was a lovely day and everyone agreed that the cheer squad made the games more fun. Of all the teams there, Enviros had the loudest supporters. Although, this was a friendly game, there were some heated moments because scientists are competitive in nature and everyone wanted to win.