



THE SPEKBOOM



WELCOME TO 2011
FROM FRED



**DATES TO
REMEMBER**

- **7th May:**
Enviros Relay Race
- **18th May**
Voting Day
- **22nd May:**
International Biodiveristy Day
- **5th June:**
World Environment Day

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The song “Hotel California” by the Eagles was a popular hit in my youth. It sticks for the imagery it portrays of being prisoners of our own device, of dancing to remember and dancing to forget, of checking out but never leaving. I feel that way about 2010- it was a year to remember, it was a year to forget. But it has come and gone – I have checked out and left. 2011 has got to be better than 2010!



Why do I say that? We are back to a full complement of staff with Charlie returning from a productive sabbatical. Charlie’s absence impacted on Sheona who carried extra load at home and at work, and it came at a time when contact time with undergraduate students was reduced due to the World Cup. While we did what we could, the extra load of having a senior staff member out of the loop was telling.

A new development within the department was the capping of entry into second year, which I did not feel

good about because it is not fair on students who meet the requirements of progression but whose planned university careers are terminated by the number 50. The right way to limit numbers is to do so when students enter university and not after they get

Rebecca & Bennie in Ethiopia

here, so we are in discussion with the Dean of the faculty of Science concerning a way forward.

“The Biodiversity Human Capital Development Programme” (led by SANBI and the Lewis Foundation) in partnership with the Departments of Environmental Affairs, Water Affairs, and Science and Technology was held early in March. The summit was attended by Patrick Curran, Caroline

Evans and Zuki Kota. Rebecca Joubert went to Ethiopia with Bennie van der Waal of the Geography Department as two of six sponsored “Outstanding Young Geomorphologists from Africa” selected by the International Association of Geomorphologists (IAG) to attend their Regional Conference in Addis Ababa.

We had a very productive writing week end for staff and postgraduate students at Canon Rocks. There were nine participants and we expect at least nine papers to be produced. The event was sponsored by the NRF through a grant made to James Gambiza, and the event ran very successfully thanks to hard work behind the scenes by Zelda Odenaal.

Please all prepare for the Annual Environmental Relay Plod from Grahamstown to Port Alfred on 7th May. The relay is followed by a braai at in a Nature Reserve along the Kowie River, where you can cool off and chill over pint and a meal cooked on coals. Rock on 2011!

Fred

JAMES GAMBIZA HONOURÉD BY AWARD



When talking about winning the 2011 Distinguished Senior Teaching Award, James says he is deeply honoured. "To be recognized this way by your colleagues, after 15 years of teaching, is something special," he says.

James has been at Rhodes since October 2003. Before that he was a lecturer at the University of Zimbabwe's Department of Biological Sciences. He is, by training, an ecologist, and wrote and developed an Honours course on Ecological Modelling which he is still teaching. The course has a good take-up rate, with between three and five students taking it each year. At undergraduate level he teaches Land Degradation, Ecological Systems, Biodiversity

and Ecological Monitoring. He also supervises a number of Masters and PhD students.

He believes teaching is active learning and students participation is a vital part in the process. His "secret horror" is the thought of standing up in front of a class of blank and unresponsive faces, and being expected to impart a one-way stream of facts. Instead he works with his students to "construct knowledge".

Another essential component of both James' teaching and the ethos of the department is that of problem-based learning. This involves looking at real-world problems and formulating strategies to tackle them effectively in the field.

At 3rd year level the department carries out a year-long department wide practical, with an overarching theme. This year the project is focused on the state of the environment within the Grahamstown area and the hope is that policy makers



within the Makan Municipality will take up the data produced and utilize it in their policy-making decisions.

Picture by Sophie Smith

James says the process of preparing his teaching portfolio and going through panel interviews and monitored lectures was both useful and enjoyable. When the call came confirming he had won the award, he was "struck speechless" for one of the very few times in his life, before punching the air and leaping for joy.

(Adapted from Rhodes: story by Jeannie McKeown)



URBAN GREENING SHORT COURSE LAUNCHED

The department recently held its inaugural public short course on Urban Forestry and Urban Greening for Sustainable Municipalities. Held in the last week of March, the course attracted 26 participants. The public short

course compliments the offering of an optional Honours module in urban greening developed by Prof Charlie Shackleton a couple of years ago. He then teamed up with Lawrence Sisitka of the Environmental Research and

Learning Centre at Rhodes and Mark Hazell in charge of Grounds and Gardens at Rhodes to offer the week long public course.

Participants were treated to a range of topics and learning exercises, culminating in the

URBAN GREENING SHORT COURSE CONTD..



development of plan for a multi-functional public urban green space, which required of them to bring together the learning elements of the previous few days. Each day of the course commenced with identification and growth attributes of a few common urban trees, and then moved on to lectures and participatory exercises around different topics, including ecological, economic and social benefits of urban forestry and greening, monitoring, tree evaluation and care, ecoliteracy, inequalities in urban greening processes and plans, and private and public urban greening, amongst others. A common lament was the paucity of research and policy information from South and southern Africa – this is certainly fertile ground for postgraduate research. Afternoons were then spent on field trips or participatory exercises.

The field trips were local, around Rhodes campus as well as different parks and suburbs of Grahamstown. The last day included topics on how to engage stakeholders and motivate municipalities around issues and challenges related to urban forestry and greening. A fun quiz was offered in the final session, which helped participants revise some of the key elements of the course in a humorous fashion. Overall, participants rated the course highly and enthused that they would be recommending it to their colleagues and managers. Thus, it seems it could become a permanent offering in the calendar of Enviro Science activities.



Cathedral square and students

“ A common lament was the paucity of research and policy information from South and southern Africa ”



Oatlands park and students

Vukani hh with tree and students



2011 HONOURS FIELDTRIP

Aloes, PCQ's, LFA's and good times in the Lesseyton Area. The Environmental Science honours class of 2011 embarked on the traditional honours field trip on Sunday the 30th of January., the study site being a group of villages in the Lesseyton area, just north of Queenstown. The students were lead by Charlie Shackleton and Kathy Cassidy, and were joined later by James Gambiza as well as a brief visit by Sheona Shackleton. The field trip was not only an academic exercise but also included team building as the honours group got to know each other and build some team spirit and camaraderie.

This region was selected for the field trip as it is the site for a four year comparative, multidisciplinary research project which is investigating the vulnerability, coping and adaptation of rural people within the context of climate change and HIV/AIDS in South Africa. This excursion, while aimed at building class morale, would also contribute to the greater project. In

light of this, much of the time in the field was spent tanning and fishing... Excuse me. Much of the time was spent collecting data on the density and distribution of the resilient plant *Aloe ferox* which, when harvested for its sap, can provide a much needed income for financially poor residents.

The group decided that the Point-Centred Quarter Method or PCQ would be the most suitable data collection method in terms of the density, size, and distribution of *Aloe ferox* while also allowing the team to break up into two smaller groups meaning more effective data collection in terms of speed and area covered.

On Tuesday Dr. James Gambiza arrived at the honours field trip in order to teach the honours class the Landscape Function Analysis (LFA) which was developed by David Tongway of Australia. The LFA method is a monitoring procedure, which uses simple indicators to assess how well an ecosystem works as a biochemical system. This method is intended for



THE GANG(STERS)!

repeated measurements (to account for seasonal change) and can be applied to a variety of landscapes. By looking for health signs in supporting vegetation or soil erosion, one tries to assess if nutrients are retained or lost by the landscape function.

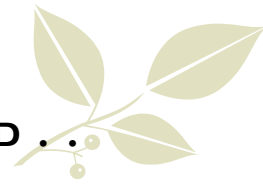
The class was trained to extend a line through the landscape (up to 50m) and to painstakingly write down

The LFA method is a monitoring procedure which uses simple indicators to assess how well an ecosystem works as a biochemical system



How to really study at Honours level

HONOURS TRIP CONTD.



what they saw on the ground. Examples of what was recorded are: grassy sward (a patch of grass), a bare patch of ground, logs and decaying biomaterial. This was then recorded in an excel spreadsheet to derive an index. Much debate and questioning was endured by Dr. Gambiza, and the class came away from the experienced somewhat enriched.

After every hard day of data collection in the field, and after having been driven so safely by Adam, the team would come together back at the lodge (known as Stagger Inn) and relax. The team did a number of activities including hiking, going for a paddle or a swim coupled with fishing (James was very successful in this and caught a number of ferocious bass), while others chose to sit back and enjoy some T.V. The team was also lead in some teambuilding exercises by Charlie, here we not only learnt about the rest of the

class but also got to learn more about ourselves. All in all the trip was a great experience and enjoyed by all, the class was given the opportunity not only to expand our knowledge in terms of the academic aspects of honours but also to gain a greater understanding of ourselves and the team we will be spending the rest of the year with. The honours class would like to thank Charlie, Kathy and all those who made the experience possible.

“Much debate & questioning was endured by Dr Gambiza and the class came away somewhat enriched”



Charlie & Ollie with a common-age user in Lesseyton

2011 GRADUATION

This year, graduation took on a rather ‘high’ note with the serving of High Tea on the lawns of Bangor House. Despite the inclement weather, the event was an immense success, enjoyed by all. The cakes, chocolates, pastries, canapés & cannelloni on offer took one’s breath away, and

looked almost too good to eat. Of course, no High Tea would be complete without the serving of tea, and guests at the event were treated to a huge variety, from the traditional such as Earl Grey, Five Roses and Rooibos to the more exotic like Camomile, Ginger, Orange and spiced

Chai latte. Well done to Zelda and her team of merry helpers—Kathy, Rebecca, Phinidwe and Gladman.



A DIVERSE GEO-CULTURAL EXPERIENCE OF ETHIOPIA

By Rebecca Joubert

The 2011 International Association of Geomorphologists (IAG) Regional Conference held in Addis Ababa, Ethiopia (18 – 22 February) was well attended with roughly 150 participants from 30 countries. I was privileged to attend the conference through Grants provided by the IAG and Rhodes University.

The 2011 theme: 'Human Adaptation to Changing Tropical Environments', birthed a variety of geomorphological topics relating to environmental change and human impacts, land degradation and resilience, land-



slides, volcanoes, rivers and wetlands, together with rare topics such as Geo-heritages, Geo-diversity and Planetary Geomorphology.

Keynote lectures stimulated critical and holistic thinking in the field of Geomorphology through topics that addressed present day research challenges, humans as major drivers of landscape change and the concept of the 'Anthropocene' as a new period in geological history.

Included in the conference programme were several pre- and post- conference field trips to the main Ethiopian Rift Valley and the Northern Ethiopian Highlands to visit a variety of landscape features associated with rifting of the Ethiopian landscape, such as volcanic depressions, lakes and salt pans, as well as the famous Danakil Depression, which is the hottest place on earth, containing some of the oldest hominid fossils.

A personal highlight was the pre-conference course on landslide mapping, provided by the IAG as part of

a skills development programme for young geomorphologists. The course started with a day long road trip from Addis Ababa north to the town of Dessie located on the western edge of the Afar rift basin (part of the main Ethiopian Rift Valley).

From Addis Ababa we ascended into the Ethiopian Highlands towards Afar Window (approx. 3000 m.a.s.l.), a view site on the eastern edge of the Afar basin, characterised by a

spectacular vertical drop (approx. 800 m) from the top of the fault escarpment into the Afar basin and expansive Afar lowlands.

From Afar Window we journeyed along the fault escarpment and descended into the rift basin to continue north toward Dessie, situated in a relatively small 'hanging' rift basin on the edge of the Afar. From here we conducted a three day intensive mapping course during which we were able to view impressive landscape features such as debris flows and landslides, and the Borkena River Falls and Gorge associated with a major fault along the lower end of Dessie basin.

The kindness and gentleness of the Ethiopian people together with aromas of indigenous coffee, spices and incense along street markets contributed to the rich cultural and geomorphological experience of the 2011 IAG Regional Conference in Addis Ababa.



The kindness and gentleness of the Ethiopian people together with exotic aromas contributed to the rich cultural experience



MAURA ANDREW: RESEARCH ASSOCIATE



As part of her contribution to making our society more sustainable, Maura Andrew is embarking on a PhD that will investigate the possibility of establishing new social institutions that provide incentives and rewards for farmers in the Baviaanskloof Mega-Reserve Area

to become involved in restoration and sustainable farming, and in doing so enhance the provision of ecosystem services such as water and carbon.

The project is an action research project aimed at trying to create these new institutions and will involve considerable stakeholder engagement with the land owners/users, the authorities and ecosystem service users.

While Maura is registered with the Conservation Ecology Dept. at Stellenbosch University, she has lived in Grahamstown for many years and is a Research Associate with the Dept. of Environmental Science at Rhodes. Her study is being funded and supported by the PRESENCE Learning Network, and its secretariat Livinglands, who identified this project as a key priority in order to ensure the long-

term sustainability of the restoration programme in the Baviaanskloof and other areas.

Given the transdisciplinary nature of this study and the need to design these new institutions to suit the specific socio-ecological context, Maura will be collaborating with the many other students and academics undertaking ecological, bio-physical and socio-economic research in the Baviaanskloof Mega-Reserve and World Heritage Area. Due to the great challenge that this project entails, Maura would welcome any support or assistance, and would value being kept informed of any new findings or developments that could impact on or assist in the process of creating these institutions. She can be contacted at m.andrew@ru.ac.za or via cell on 072 386 0537.

ENVIRONMENTAL SKILLS SUMMIT



By Patrick Curran.

From the 1st to the 3rd of March 2011 a three Environmental Science masters students were privileged to attend the Environmental Skills Summit hosted by the Biodiversity Human Capital Programme (led by SANBI and the Lewis Foundation), in partnership with the Departments of Environmental Affairs, Water Affairs, and Science and Technology. The summit aimed to provide a platform for interaction amongst South Africa's environmental sector and offer the opportunity to engage as a sector with each other and the country's skills development agencies. Zukiswa Kota, Caroline Evans and Patrick Curran

joined a wide range of delegates from government departments, NGOs, academics and students in crucial discussions surrounding how to develop the vital environmental skills needed to move the country towards a "green" growth path. A wide range of presentations on the current state of skills in the environmental sector and gaps and challenges to developing these were made on the first day. The second day allowed for more focussed discussion groups surrounding practical ideas and plans to address the collective concerns and opportunities within the sector.

These discussion groups focussed on a wide variety of topics such as 'developing

employment structures for postgraduate students'. These sessions allowed us to actively contribute to the discussions and offer a student's perspective surrounding the development of environmental skills. This summit opened our eyes to the challenges and opportunities faced by the environmental sector, which we as postgrads will soon enter.

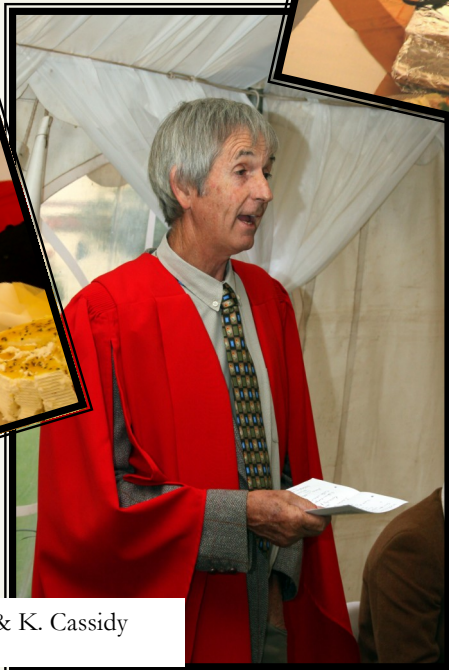


Caroline Evans talking to delegates at the summit

2ND YEAR FISHRIVER FIELDTRIP



GRADUATION HIGH TEA AT BANGOR



Photos by: Memories Photography & K. Cassidy

Design & Layout: Kathy Cassidy
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