



RHODES UNIVERSITY
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Environmental Science

2008 is our 10 year anniversary!

Newsletter

November 2008



CONFERENCES AND RECENT EVENTS:



Highlights of Thicket Forum 2008

by Claire Martens

This year the Thicket Forum celebrated its 5th anniversary. According to Gillian McGregor, the Chairperson of the Organising Committee, it was the first time that the Forum could boast such substantial student participation. The students from the Biodiversity and Conservation Honours class at Rhodes University were in attendance, along with several Honours students from the Department of Environmental Science (DES) and students from the Nelson Mandela Metropolitan University (NMMU). A number of presentations were made by students from these universities, including presentations by honours students who are funded by the Forum and three DES Masters students who are doing research on commonages.

The Forum was held at the Goldfields Education Centre in the Thomas Baines Nature Reserve, which enabled all the participants to get down and dirty. Working for Water organised an 'alien hack' in one corner of the reserve in which everyone was involved.

This year's Forum was well attended by various distinguished researchers from NMMU, Rhodes University and further afield; as well as guests from Government, the local farming community and NGOs. The proceedings began with a passionate lecture by Prof Graham Kerley, questioning various discourses on elephants. Andrew Knight from DES (a founding member and participant of the Forum for the last five years) then spoke about the history of the Forum, what it represents today and where he would like to see it going in the future.

The Forum then commenced with lectures on current Thicket research, conservation planning and stewardship, NGO work across the region, farmers' perspectives

on Thicket, and an interactive discussion on biofuels. James Blignaut, a leading environmental economist in South Africa, gave an informative and entertaining lecture on Payments for Ecosystem Services, a new and exciting concept for conservation, which is just beginning to emerge in South Africa. Awards for best presentations were presented to NMMU honours student Rachal Cooper for "Best Young Thicketeer" for her presentation on the impact of the alien invasive Fallow Deer on thicket vegetation. Linda Redfern was awarded the "Best 'Old' Thicketeer" for her warm hearted and enthusiastic talk on her role in the translocation and restoration of flora and fauna in Coega Industrial development Zone.

On the night of the Formal Dinner, the quirky, somewhat notorious Basil Mills – a local Grahamstown identity - gave an interesting speech about his life in conservation. He is currently working at Thomas Baines doing environmental education with children. Despite a power failure during the evening, proceedings went ahead and the three-course meal was enjoyed under romantic candlelight, with Jonathan Prior leading the after-dinner dancing to the music of his car stereo.

This is indicative of the informal and relaxed atmosphere that pervades the Thicket Forum, where all work in and on the Thicket is welcomed and appreciated. It is a wonderful opportunity for young researchers to present their research without the stress associated with large conferences. Mike Powell, Claire Martens and Nicholas Davenport from DES presented on their Masters' findings.



Report on Recent Fynbos Forum

by Saskia Fourie

The Interfaces Forum, consisting of the Joint Fynbos Forum and Arid Zone Ecology Forum, was well attended this year with 367 delegates. The Forum was held on 3-7 August in Outdshoorn and the theme of

the conference was “Linking across Biome Boundaries”. This made for an interesting mix of arid zone and fynbos presentations. As always, the conference was attended by researchers, managers, NGO representatives, landowners, educators etc., which makes it a very worthwhile conference to attend and ensures much of the work presented there is put into practice.

Two members of DES presented at the conference. Saskia Fourie presented an overview of the Kouga Riparian Rehabilitation Project, while Matt McConnachie presented preliminary findings of his MSc titled “Optimising cost-efficiency in restoring natural capital” based on his work in the Kouga. Bennie van der Waal and Adrian Pietersen from Geography at Rhodes also presented their MSc work; Adrian on the geomorphology of river rehabilitation and Bennie on the influence of *Acacia mearnsii* on soil properties in the Kouga catchment. Victoria Wilman, the horticulturist at the Kouga dam nursery, which provides the plant material for the project, also presented her work.



RU Enviro Savvy Schools Environmental Quiz



One of the highlights of the 10th anniversary celebrations of the Department of Environmental Science was an Environmental Quiz in which a number of local schools participated. The quiz was produced, organised and hosted by Honours students, and attracted senior learners and large contingents of supporters from Graeme and Kingswood Colleges, and Mary Waters, Nathaniel Nyaluza, Nombulelo and Victoria Girls High Schools.

The hosts for the quiz were Geri Simak



and Brendan Turk, who provided youthful energy, wit and charm for participants and spectators alike.

The quiz was run as a set of 2 elimination rounds with 3 schools, each with 3 participants, competing against each other in each round, of which the 3 teams with the highest scores made the final round. The finalists were Graeme College, Kingswood College and Nombulelo High School. In a closely contested match, Victoria Girls High School ended up victorious, winning a sum of R 5 000 for their School, with Kingswood College and Graeme College second and third respectively.



The quiz was structured around multiple choice, first to reply, sound recognition and other styles of

question, and participants needed to keep their wits about them in a keenly fought contest. Congratulations must go to the winners, and the organisers are gratefully acknowledged for setting a very high standard for the RU Enviro Savvy Quiz, which we hope will become an annual event and will attract even greater interest than the 2008 occasion.





Environmental Science Department contributes to local NGO

by Zamuxolo Matiwana

Staff and students of the Environmental Science Department celebrated their 10th anniversary in style by organising “run for the environment relay” from Grahamstown to Port Alfred recently.

Five teams of 10 runners each took part and each team was required to raise funds for donation to a local environmental Non Governmental Organisation (NGO). A total

of R1 400 was raised by the department. “The names of the potential recipient NGOs were placed in a hat and one drawn out. The selected NGO is the Millennium Tree Planting Project, who has been active in greening the poorer areas of Grahamstown over a number of years,” the Environmental Science Head of Department Professor Charlie Shackleton explained.

“We motivated students to raise funds as part of the relay activity, rather than simply running for themselves. This simultaneously helps build links with local community and

environmental projects to the benefit of all residents of Grahamstown, not just ourselves, as well as raising awareness that the environment is something that affects the well-being of everyone. It’s only by everyone doing their bit, however small, that we can secure a healthy and sustainable environment,” said Prof Shackleton.

MTPP field worker Thanduxolo Kula said they were very happy to receive the donation from Environmental Science.” It is going to help us to buy tanks so that we can conserve water and establish a nursery for the Vukani community,” he said. “We undertook to plant 120 trees a month.” “The Millennium Tree Planting Project is doing good work. But like many grassroots projects funding is at times insecure or insufficient to meet all their goals. They are doing excellent work in promoting tree planting within Grahamstown and these funds will assist in transport, more trees and so on,” said Prof Shackleton.



MTPP’s next project was to launch Arbour Week at the Siphso Mazwai Post Office and Makana’s Kop in Joza on 3 September 2008. “We will invite nearby schools to attend the event and learn about the importance of trees and how to take care of them,” said Mr Kula.

MTPP was founded in 1999 with the aim of promoting indigenous trees in the township and started planting indigenous trees during the year 2000 in schools, public institutions [like clinics] and in private properties in the township.



10-Year Anniversary T-Shirts

To further celebrate the Department's 10-year anniversary, our post-graduate students and staff members were all supplied with T-shirts. 'Live simply so others can simply live' was the chosen slogan for the shirts, promoting environmentally conscious living.



Honours students Zuki Kota & Dylan Weyer modelling our 10-year anniversary shirts



10th ANNIVERSARY PANEL DISCUSSION

by Charlie Shackleton

As one of the highlights of our tenth anniversary celebrations, we hosted a panel discussion of top Southern African environmental scientists to contemplate the environmental challenges for the next decade. The function attracted an audience of 270 people to listen to eminent speakers from CSIR, and the Universities of Cape Town and Wits who reflected on the last ten years and then tried to identify future challenges. Dr Bob Scholes, an A-rated scientist, led a sobering talk, reflecting that in the past decade humankind, in general, had come to realise its impact on the global support systems and resources. In particular, he noted that (i) in the past decade humankind has reached an understanding of the finite nature of the resource available to them with a total

footprint in which over 50 % of the total global net primary productivity is not appropriated for human purposes, (ii) the complexity of environmental systems is recognised and requires adaptive management, and (iii) people have really been put into the environmental equation, in terms of causes of problems but also as decision-makers, managers and users – environmental systems include the social dimensions and required multi-disciplinary perspectives and programmes. He concluded that humans had about a twenty year window of opportunity to make far-reaching decisions about future trajectories of growth and consumption which will determine the fate and well-being of generations for the next several millennia. Beyond the next twenty years any decisions will be too late. But one thing is clear, even with large leaps in technologies and efficiencies, current consumption patterns and scenarios of economic growth above all else, cannot continue.

In considering the next decade, Dr Rachel Wynberg from UCT lamented that South Africa was currently experiencing very weak involvement in environmental issues. This applied to both by civil society as well as a government that was not listening to environmental concerns of its citizens or the lessons from other countries trying to promote rapid development at the expense of the environment, such as China, Russia and Brazil. In the long term, ignoring the myriad environmental warnings will cost the country dearly in the future. According to Wynberg, specific issues of concern for the next decade include establishing and maintaining food security; reversing the unsustainability of the current land reform programme that is in only interested in how many hectares change ownership rather than building sustainable land uses and livelihoods; adapting to climate change; increasing substantially the efficiencies of energy, water and resource use, and addressing poverty and rampant consumerism. She was adamant that environmentalists and environmental scientists have to make strategic partnerships

to strengthen government and civil society. Prof Coleen Vogel from Wits, and Dr Tanya Abrahamse (CEO of the SA National Biodiversity Institute) ended off outlining the types of environmental graduates and research that universities will have to produce to address these challenges. Two key requirements are the need for much more attention to the popularisation of science rather than the current emphasis on publications in narrow academic journals, and stronger linkages between social and natural sciences examining and understanding human-environmental systems. There was agreement that science is not value free and popularism of science will go a long way to ensuring that the right science is done that addresses the development challenges of South Africa and the region. Graduates and researchers also need a lot more exposure to and practice in interdisciplinary programmes, including learning by doing and with all sectors and levels of society.



Ten years of environmental growth and innovation

by Charlie Shackleton

In 1996 Drs Ted Avis (Botany) and Kate Rowntree (Geography) motivated for the introduction of environmental science at Rhodes. This was approved by the university administration the subsequent year, and the first staff post was advertised and filled in mid-1998. The new recruit was Professor Christo Fabricius, who used his considerable energies and capacities for strategic vision to firstly plot a direction for environmental science at Rhodes, and secondly carve out a niche at Rhodes and nationally. The first tussles related to basic issues such as an office and furniture, followed by skirmishes for the provision of administrative support and then on to the level and content of environmental courses. At this stage it was designated the Environmental Science programme, and was envisaged to coordinate a range of existing modules across

several departments and combine certain offerings into an environmental science stream. However, Christo soon realised larger potential and pushed hard for the establishment of a dedicated environmental science course taught by environmental scientists. The first semester course "Introduction to Environmental Science" was launched in 1999 with 22 second year students signing up.

The following year Charlie Shackleton joined the dept, along with Sheona Shackleton as a non-funded research associate. It was housed in the old Botany building. In 2001 an Honours course was offered (four students), along with new semester courses at both second and third year levels. After external review of the progress of the programme, it was agreed that it become an independent, self-standing department in 2002. This coincided with the graduation of the first Masters student (Tebogho Motinyane) in Environmental Science at Rhodes, and provision of a full-time administrator (then Julie Burton-Heitz). James Gambiza joined the dept in 2003. By this time staff and postgrad levels were growing at such a pace that space constraints were severe. Additional space was provided in the Geography building, but being split across two buildings was not ideal. Thus, at the end of 2005, the dept moved to Bangor House on St Peters Campus. Kathy Cassidy joined in mid-2006 as a part-time Technician. That same year saw the graduation of the first PhD student (Sheona Shackleton). A new semester course was launched in 2007, thereby finalising a full two year major in Enviro Science. In this last year there have been several staff changes. Christo Fabricius moved on to higher responsibilities at NMMU and was replaced by Fred Ellery. Not long after, Sheona Shackleton was appointed the newly approved fourth academic post, and Jenfred Engelbrecht as the office administrator.

Over the years a total of 209 Bachelors degrees with Environmental Science as a major have been awarded. At postgraduate level there have been 55 Honours, 18 Masters

and two PhDs. But growth has continued every year, such that the next ten years will probably see graduation rates about three times the first ten years. Typically class sizes are over 50 at second year, approximately 35 at third year and about a dozen Honours. Over the last two years we have had about 16 Masters and five PhDs registered at any one time.

Much of this success has been a result of a focus on a relatively small range of environmental issues, rather than trying to deal with the whole, ever-expanding array, along with some useful guiding principles in helping us decide which new initiatives and opportunities to engage in or not. These principles have included:

- address issues at the people – environment interface,
- work across disciplinary boundaries and in multi-disciplinary groups,
- respect for different knowledge systems
- focus on Africa and contributing an African perspective, experiences and knowledge to international debates
- be adaptive and responsive to the constant changes in environmental issues, governance and thinking
- foster learning relationships with communities and stakeholders
- produce graduates and knowledge capable of meeting current environmental challenges and with adaptive capacity to address future ones

Equally impressive has been the attention to research output, community engagement and building links with other departments at Rhodes, nationally and internationally. For its size, Enviros is one of the most productive departments at Rhodes, averaging approximately 12 peer-reviewed journal papers and three book chapters per year. Staff have edited or co-edited three books during the last five years with a further three in progress. These products have been co-authored with multiple institutions around the world, but pleasingly with eight other depts at Rhodes, a true testament to our inter-disciplinarity. Community engagement

has seen us involved in numerous projects and raising of millions of rands. Some are small, such as the donation of a few trees to a school or community garden or linking community groups with authorities or NGOs who can assist them, through to large scale programmes on land use planning, natural resource management or training courses. According to Charlie Shackleton's recent introduction at the 10th anniversary panel discussion the key ingredients underpinning the obvious successes of Enviros over the last 10 years include:

- a strong and reputable university that has allowed Enviros to grow and find our own way,
- being adaptive and responsive to rapid changes in the discipline, international and national environmental contexts, debates, knowledge and student needs,
- attracting the right people, as either staff or fostering productive partnerships with others (both at Rhodes and elsewhere), and
- focusing on selected niche areas and directing our energies within these to have real impact both on the ground and at policy level.

With these foundations the next ten years should be secure, stimulating and satisfying!

Inter-departmental Teas

by Sandy Collings

The socialising between departments has continued with our interdepartmental teas on the occasional Friday. Geography has again hosted our staff and post-grads to tea and cake on one such occasion. We have also had the privilege of being visited by the Botany contingent recently. These get-togethers have been and will continue to be a great way in which to bring different departments together and of course, bridge the gap between our different disciplines.

Braai and Movie Social Evening

by Claire Martins

On the 26th September a few of the senior post-grads and staff braved a frosty wind to attend a braai and movie evening at the Environmental Science Department. Being tough environmental warriors, the weather could not keep us away. After a delicious meal we all converged on Roxbury to watch the new South African film "Hansie". It portrayed the rise and fall of the famous South African cricket celebrity and role model. The evening was successful in providing an opportunity to spend some time relaxing with our colleagues outside the office.

The Mexican youth force: a tribe to be reckoned with

by Dylan McGarry

In early August, I had the opportunity of taking part in The XVII International AIDS Conference, in Mexico City, Mexico. I was invited to the conference by the Mexican Youth Force (MYF) funded by UNICEF. The Youth Force was developed at the previous AIDS conference, held in Canada in 2006. The idea around the force is that young people collectively engage with delegates at the main conference, to raise youth issues in the international AIDS agenda. The main conference thus provides space for young people to take positions as chairs for large discussions, run workshops and give talks within the main conference, as well as protest in the streets. The MYF tribe (consisting of 350 young people, aged between 18 - 30), took Mexico City by surprise, the city usually confident and colourful had met its match. UNICEF had hosted a pre-conference/workshop three days before the main conference for the sharing of ideas, skills training and to master the art of civil

activism, because little did we know that we would spend a considerable amount of time marching through the streets of Mexico, armed with flowers and condoms (a fantastic way to get accustomed to the daunting scale of the immense metropolis). After three days of intensive workshops, seminars and networking we hit the streets and joined the largest anti-homophobia march in history, that meandered through the historical part of the city, all the while MTV cameramen (who were making a documentary of the youth force) followed our every move, occasionally tripping over giant polystyrene condoms, or walking backwards into banners!

The main conference can be best described as the Olympics of conferences, with over 35 000 people attending the opening ceremony and large scale events seemed daunting and colossal. Yet quickly, with the combined force of 350 super-best-friends, we managed

to make our way through the thick sea of delegates to the right seminars, workshops and poster presentations. Sarah Kaschula and I both presented individual posters, which were received with great interest. There was certainly a void when it came to the links between HIV/AIDS and the environment. I did however come across a great project based in Canada which works in several different African countries, the

project is called "Plant trees, not AIDS" and addresses the holistic affect of HIV/AIDS. An organisation called "project FOCUS" also had some really exciting new approaches on who to engage with in rural communities, which they had developed in Uganda. Surprisingly, the most inspiring perspectives I came across at the main conference came from Bill Clinton. He bravely stated that there was no such thing as an "AIDS specific approach to health and well-being". He spoke passionately about the need to look beyond AIDS in developing holistic responses to HIV/AIDS, listing environmental management as one such avenue to engage with, especially in developing countries.



The entire experience certainly broadened my perspectives, and it was fascinating to observe what was happening on the edges of the conferences, from the sidelines. For example, the Zapatista, a rebel movement representing displaced subsistence farmers from the north of Mexico, who were constantly protesting outside the conference, and in the streets of Mexico, marched and sang triumphantly naked, with the occasional protester wearing a picture of the president over their genitals. They were protesting land restrictions enforced by the current government, and were naked to represent how they had been stripped of their dignity and culture. Their protest was powerful and very moving.

At the close of the conference, we all parted teary eyed, as we had now forged strong bonds with our fellow comrades through pivotal moments like meeting Bill Clinton and Ban Ki-Moon; protesting homophobia through historical Mexico, speaking in front of thousands of people; co-starring in a documentary for MTV and surviving scams and terrifying bus rides. Now almost two months later, I am happy to report that through the wonders of "the internet" and "facebook" the youth force is as unified as ever, and at times it seems as if the conference has not stopped.

For more information about the world AIDS conference and some great organisations go to

www.aids2008.org

www.youthaids2008.org

www.projectfocus.org



My beloved Mexican tribe

My moment of fame with MTV crew



Masters profile: Kagiso Mangwale

What does your research entail?
The escalating talks on global

warming, and the contribution of carbon towards this, have resulted in growing interest amongst the scientific community in carbon dynamics. This involves, among others, the quantification of carbon stocks in terrestrial ecosystems. Deforestation and forest degradation are said to result in the loss of biomass and subsequently carbon stocks of forests. Most of the world's forests are said to be in a degraded state due to anthropological activities, thus there is a need to determine and characterise these forests in order to know which ones need to be restored. The Matiwane forest has been identified by R3G for restoration, but as yet the state of the forest has not been reported and the carbon inventory of this forest is unknown. My research will involve assessing the current condition of the Matiwane forest and the impact of forest degradation on the carbon sequestration of this forest.

commonage is in fact causing the classic "Tragedy of the Commons" and compromising the health of the remnant thicket vegetation; or whether the value of direct ecosystem services, like fodder for cattle and wood for fuel, provided by the heavily-used areas of the commonage outweighs the presumed loss of indirect ecosystem services, such as soil retention and carbon sequestration.

Mercedes' introduction to environmental concerns

Growing up in small-town Wisconsin, I understood little of the complex environmental and social battles being waged in the Amazon rainforest. Yet, throughout elementary school I raised funds to purchase acres of rainforest on another continent for conservation. Through independent research in Africa and community development closer to home, I have acquired a "toolbox" of skills for both evaluating and facilitating sustainable development.

Searching for community perceptions of conservation, I spent summer 2005 interviewing rural farmers near Mt. Elgon National Park and Forest Preserve in Kenya. I learned from one of South Africa's leading researchers on community-based conservation that in a landmark settlement, the indigenous Makuleke people won communal management rights over Park lands wrongfully seized under Apartheid law. Still, the national parks' Director of Scientific Research revealed that the innovative Joint Management Committee created to transfer management capacity to the Makuleke highlights the discrepancies between government and local objectives, between conservation and development goals, and between local capacity and need.



Masters Profile: Mercedes Stickler

What does your research entail?

I am spending my Fulbright year investigating the vegetation on the Bathurst commonage and neighbouring Waters Meeting Nature Reserve to find out whether the impact of multiple land uses on the

As a volunteer and environmental sciences graduate, I am fundamentally interested in community development, but I look at communities and institutions through an environmental lens. I want to ensure that people have access to the natural resources

that can help them gain better access to financial capital. Through field research abroad and evaluating grant proposals at the Grand Victoria Foundation, I realized that from the South Side of Chicago to the World Bank, “development” often ignores environmental considerations. One hundred years of development have proven that this cannot only be an “outside-in” process. My experiences on Mt. Elgon and in Chicago highlight the fact that even “inside-out” approaches typically require government support.

I don’t propose to have all the solutions to these communities’ needs - but I believe that they do. I plan to work with governments to incorporate an asset-based development approach that values community and natural resources alongside financial capital.

Tell us a bit about your background

I grew up in a modest Midwest town called La Crosse, Wisconsin on the banks of the mighty Mississippi River. When I wasn’t cramming for biology exams or editing the yearbook, I made time to sing, dance, and otherwise make trouble around town. After high school, I left the humdrum La Crosse life behind for green pastures at Northwestern University, just north of Chicago in Evanston,



Illinois. Although I started out as a dual-degree Music and Biology student, I quickly realized that voice lessons, choir, and ear training conflicted with lab practicals and study sessions for chemistry and calculus. I eventually found my way to Envi Sci, where I was able to build off a foundation of natural sciences with the addition of economics, political science, and sociology classes. Through volunteering around the US during school breaks, I learned about unconventional study abroad opportunities in Africa and decided to spend the first half of my third year at Uni in South Africa, where I lived with families in Langa, the Bo-Kaap, the Ciskei, and Stellenbosch.

Last year I was the Agricultural Research Assistant to the Howard G. Buffett Foundation, a private American Foundation that supports agricultural development projects throughout Africa and the developing world. Based at the Foundation’s cheetah reserve in Limpopo, I was the Buffett Foundation’s eyes and ears on the ground in Mozambique, Zambia, and Mali, where I coordinated intensive research trips to learn from farmers, NGOs, business leaders and government officials about several issues facing smallholder farmers in Africa, including the impacts of American food aid policy and agricultural subsidies.

Why did you come to Gtown?

It was during this semester abroad, focused on multi-culturalism and social change, that I was first exposed to the concept of Community Based Natural Resource Management (CBNRM). As part of my month-long research project at SANParks, I got in touch with Prof. Christo Fabricius after reading some of his work on CBNRM and national park land restitution cases in South Africa. That’s how I ended up in Grahamstown - I decided to apply for a Fulbright grant to come to Rhodes and learn more from Christo in person...

Are there any differences between studying in the US and in SA?

The relationships between students and faculty here seem to be much more relaxed... which I find allows for much more open dialogue and exchange. I also appreciate the braais, volleyball tournaments, and occasional pub lunches at the Rat, which help us get to know each other outside of a purely academic setting.

Are there any 'environmental challenges' that you have been exposed to here that you did not expect?

Does load shedding count? I mean, certainly the way a country manages its power generation/energy sources is a fundamental part of environmental management, especially when so many people here rely on fuelwood or paraffin as an alternative to electricity. I also wasn't as familiar with the trade in medicinal plants and how that impacts rare and endangered species; I find the interactions between rural gatherers, traditional healers, urban distributors, and users in both rural and urban settings to be at once fascinating and impossibly complex, particularly from a management perspective.

Have you had any surprising experiences over here?

The choir tour to Cape Town and back was definitely an (unexpected) highlight of my year; being crammed into a caravan with 25 other people for 8 days through bone-chilling cold and fire-fanning heat was a fun and crazy way to spend my September vac. And of course we had lots of fun performing for school kids and general audiences alike at some great venues, including St. George's Cathedral in central Cape Town.

As for crazy experiences...well, I think crawling around on the Bathurst commonage counts. Awaking before dawn to maximize daylight hours of sampling, I hiked, climbed, and occasionally crawled through dense, spiny vegetation to measure the diameter of trees, count the number of piles of cattle dung and indigenous buck spoor, and collect

soil and litter samples for laboratory analysis. In the process, I acquired numerous battle scars (although most have healed) and even had various personal items lifted by the thorns out of my closed backpack!



Staff Profile: Sheona Shackleton

How did you become interested in Environmental Science or at least in Science as a career?



I was privileged to spend my childhood (from four until I was thirteen) on the doorstep of one of Africa's most famous national parks and close to the great Victoria Falls, and these two amazing places were very much part of my life. As children in the small coal mining town of Hwange (then Wankie), we spent most of our leisure time either in the swimming pool (it is a hot place), in the bush locally (we had plenty of rocky cave-like haunts) or in the game parks. So, I grew up loving African savannas and knew that I wanted to study biology (it also helped that science was one of my better subjects at school).

My original intention was to major in Zoology, but the Botany Department at Wits was a much more dynamic and exciting place as they taught ecology – and the now world famous sustainability science expert, Brian

Walker, was one of our lecturers. Whilst I was studying for my BSc it became clear that applied problems and issues, particularly those related to the environment were what most appealed to me; hence, my Honours degree in Ecology. As I continued studying at postgrad level, my interest in ecology grew into a broader interest in people and the environment. This was fuelled by my years at the University of Transkei, where I started lecturing at the vulnerable young age of 23. I found, while working in rural South Africa, that it was impossible to ignore the crucial links between people, their livelihoods, poverty and sustainable natural resource use and management. In those early days (mid 1980s), I was one of the few botanists in the country, other than Tony Cunningham, who made reference to people in their research. I remember being really nervous about how some of my Masters' findings would be received at one of the big South African botany conferences! But all went well and I haven't looked back.

Where were you, what were you involved in before you became a staff member? Tell us a bit about your previous experiences.

I started my professional career teaching in the Department of Botany at the University of Transkei. This was during the volatile 1980's and so was a real eye opening experience for a well-insulated, northern suburbs Johannesburg girl like me. It was a great five years and it is really rewarding to see some of our past students in senior positions in the post-apartheid government and in the big research institutes such as CSIR (the new Eastern Cape premier is an ex student!). From there we moved to the lowveld in 1989 to join an 'experimental' interdisciplinary programme under Wits and funded by Anglo American – "Wits Rural Facility". Such an interdisciplinary unit was a novel concept in its day, and so we often experienced times of funding shortages (and three-month contracts) until we could convince new funders of its merits. To the

surprise of some of the more conservative members of Wits, the Facility is still going strong. My time there was incredible and it moulded me into who I am today. I worked with engineers, educational experts, doctors and nurses, anthropologists, water experts, and rural development professionals on numerous complex and exciting projects. I discovered how real world problems need to be addressed from multiple perspectives and how to work in a team. I also learned an amazing amount about the struggles of day-to-day rural life that instilled in me a huge respect for rural people and rural women in particular. I really love rural South Africans – it is them who most inspire me in my work.

As our family grew and schooling became an issue we decided to seek more stable opportunities, which included a trial period in Nelspruit when Charlie joined the government. This did not last long and we went back to Wits Rural Facility for a bit where I worked on a demographic project under the Department of Community Health at Wits. I coordinated a census of 10,000 households (60,000 people) and managed the database. This was all during the 'dodgy' (to use my daughter's favourite word) period when the Bushbuckridge community was protesting in the hope of joining Mpumalanga rather than Limpopo Province. It did not make our work easy and we had to get all sorts of 'permission' from the political leaders to continue our survey unharmed. But, I have to admit, to have that amount of data at your fingertips was phenomenal and I created population fact sheets for every village we worked in which proved useful in their leaders efforts to get water and sanitation.

Schooling again became a problem and that's when we decided to join Environmentek at CSIR in Pretoria; also an exciting time and a chance to work on some big projects, although the bottom line accounting and awful weekly time sheets were not really to my liking. We were there for about two years when the job Charlie now has at Rhodes was advertised. We were quite happy in Pretoria,

so it was a pull rather than push decision to move to Grahamstown. Like many other families, we decided this would be an ideal place to raise our children (something that has proved absolutely true) and that it would be easier for me to do a PhD here than whilst working for CSIR. The rest you know. I received Research Associate status at Rhodes on arrival and worked where and when I could on many different short and long term projects as well as completed a PhD, and here I am finally a permanent member of staff after eight years!

What are some of your career highlights over the years?

It is difficult to pull out highlights, as every stage of my career has been exciting. But, probably my time at Wits Rural Facility was the most special in terms of influencing where I am today. Of course, I am also fortunate to do lots of travelling and have built up a really good working relationship with the Centre for International Forestry Research (CIFOR) in Indonesia where I am a Senior Associate. The chance to travel to remote places that few other people go to has to be one of the greatest benefits of being a researcher in the field of environment and development.

Tell us about some of your other interests and what you like to do in your spare time. Well to be honest spare time seems to be something that is hard to come by, especially with two kids and a slave-driving husband (just joking)! I love gardening (well in the summer - I hate being out there when it is cold) and I am slowly converting my garden into a hardy, water wise indigenous paradise (Mike, I promise the big nasty trees will come out soon). I also love reading and I am really unhappy if I don't have a good novel close at hand. I have been a member of the same book club since I arrived although it has taken me some time to feel at home, as the only scientist, with all the erudite English academics, etc. who make it up (I have, however, learnt a lot from my book club friends including the right jargon for describing a

reading experience). Like most people I also enjoy travelling, although holidays have this habit of frequently escaping us. However, India is next on the agenda with Charlie's sabbatical coming up.

Alumni Profile: Dave Kirby

by Claire Martins

Dave left Rhodes in 2005 after completing a BSc (Honours) in Environmental Science. He moved to the United Kingdom and found a job within three days at Mouchel, an engineering company. Dave works in the "Land and Environment" division as an ecologist. The company is mainly concerned with civil engineering (bridges, roads and the like) and Dave is responsible for surveying the local fauna and flora whenever EIA's are required. After determining if there are any UK or European Union protected plant or animal species, he designs mitigation measures to reduce the impacts that development may have on these. Mouchel does EIA work for internal clients as well as private companies and Government groups such as the Highways Agency, Thames Water etc. At present he is doing surveys in Ireland where a large road scheme is taking place, and this has meant that he has had to "trudge through blanket bogs", which he says can be good fun.

He has faced numerous challenges on the job; for instance having to learn about the British ecology and about the applicable processes and legislation that relate to EIA consultancy over there. However, he says that he is grateful for the "practical, critical and holistic approach to thinking that is prized in the Rhodes Environmental Science Department" as this has been extremely helpful to him in dealing with his challenges. He assures us that the principles and concepts learned in the Department are universally applicable and can be used abroad.

Enviros hosts short course in Community-based Natural Resources Management for 7th year

by *Charlie Shackleton*

Under the vision and direction of Prof. Christo Fabricius (who left the dept in November last year) Enviros launched its first short course in Community-based Natural Resources Management (CBNRM) in 2001. It has been held annually since then, with the exception of 2006, and has become recognised as one of the leading courses in the country. This year the course was held from 25th – 29th August. The collaboration with the Environmental Education & Sustainability Unit continued, with the course being facilitated by Lawrence Sisitka and Soul Shava. The emphasis was on a critical evaluation of CBNRM – “towards a new realism”. It was fully subscribed with 35 participants within two weeks of advertising. There was less SADC representation than usual, with strong delegations from Gauteng and Western Cape. Participants enjoyed a full programme of four and a half days, spanning the basics of CBNRM, power relations, resource valuation, payment for ecosystem services, social dynamics, joint-learning, all illustrated by various examples and case studies. The field trip in mid-week examined the community engagement activities of Kwandwe reserve. The proof of the pudding was probably indicated by the request of two large agencies to either host another course this year or early next year, or for the presenters to design and offer a course tailor-made for these specific agencies. Unfortunately, due to other demands and plans for the rest of the year, this is unlikely, but is under discussion.

Environmental Science contributes to UCT Master's Course - Sheona Shackleton
Earlier this year Sheona Shackleton was invited by the Percy Fitzpatrick Institute

of Ornithology, UCT to teach a module on “Societies and Natural Resources” for their Conservation Biology Master's Course. Following a major evaluation of the course last year, this is the first year a socially oriented module has been offered. Sheona shared the teaching for this intensive three-week module with Dr Michael Schoon of Indiana University in the USA.

The contemporary challenges in conservation, as we continue to lose biodiversity at a rapid rate, are enormous and extremely complex, and so, by implication, go far beyond the biological to include political, social, economic and even moral and ethical dimensions. The purpose of the module was to expose students to some of the social and political issues, concepts and understandings that are crucial for addressing biodiversity conservation and to prepare them to go out into the real world of conservation practice.

The module was extremely well received and definitely changed the perspectives of a large number of students in the class, particularly those from outside of Africa - “I used to think that all we needed in this world were more Serengetis and Yellowstones, i.e. more protected areas. I did not spend much time thinking about the degree of community involvement, but I realize now that this is a fundamental question that needs to be addressed in any conservation situation”.

One of the most fun parts of the course was a debate. Within current conservation discourse there is considerable (and counterproductive) polarisation and disagreement between proponents of different viewpoints/narratives. This debate often pits social scientists against conservation biologists and has resulted in much ‘academic posturing’, some angry exchanges and selective and one-sided arguments rather than real solutions to the dilemma of biodiversity loss. The motion for the students’ debate was “Conservation and development is possible and essential”. Those supporting the motion argued as proponents of community conservation while those countering it represented proponents



of the fortress conservation narrative. This proved a fantastic way for learning, exposing the students to both sides of the “conservation and development” argument, allowing them to make their own judgments and form their own opinions.

It is likely, given the success of module, that Sheona will continue to be involved in

future years. The fact that Environmental Science was approached to contribute to this prestigious masters course (only 12 students) is recognition of the interdisciplinary nature of our work and our solid reputation in the bigger natural resource management community.



Farewell to Andrew Knight

by Georgina Cundill



At the end of September the department said a sad farewell to a very valuable piece of the furniture: Andrew Knight. Andrew has been with us since 2004, during which time his sense of humor, enthusiasm for critical debate, enjoyment of the scientific process and willingness to get involved has set an example for new and old post graduates alike.

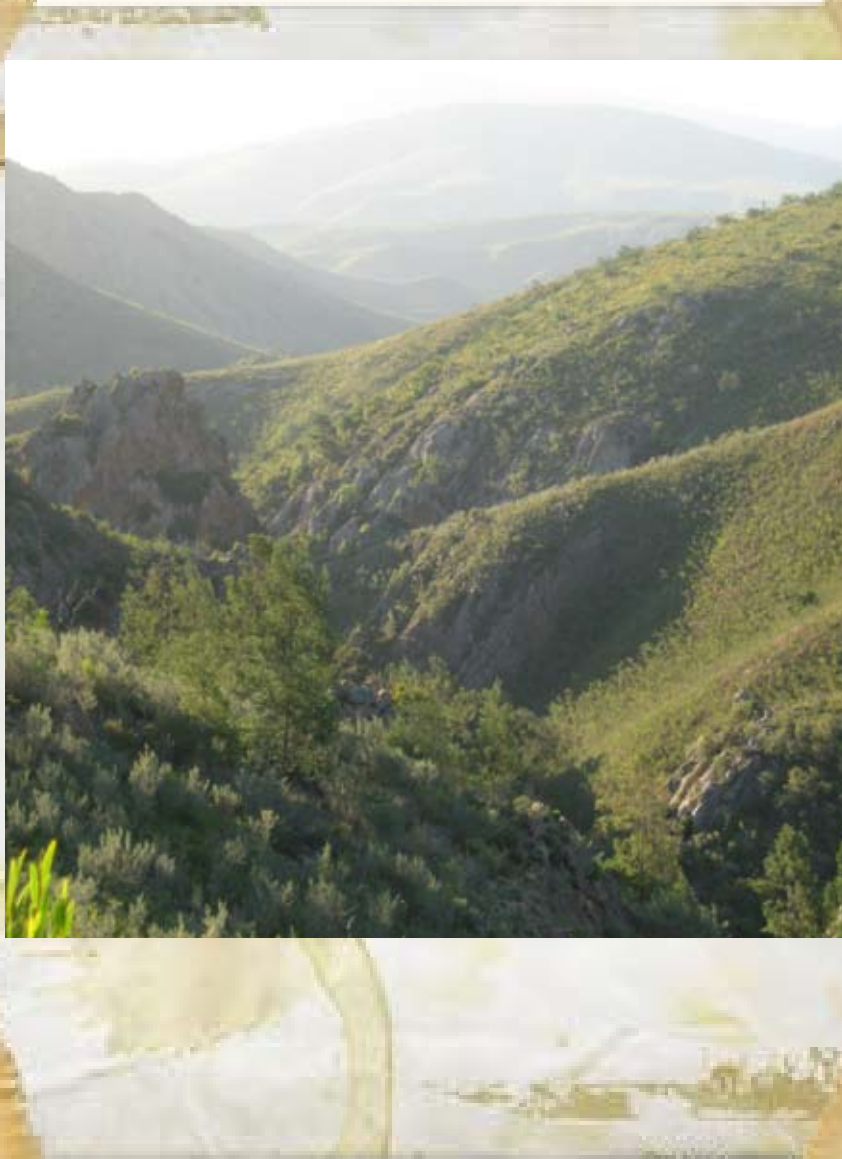
At the beginning of 2008 Andrew’s relationship with the department was formalized when he became a research associate, and coordinated and taught a large portion of the Enviros 301 course as a stand in for James Gambiza, who was on sabbatical. The aspects covered by Andrew included conservation planning, environmental monitoring, and mainstreaming. With his curly locks and very fashionable hairstyle (luckily for Andrew the mullet

came back into fashion in 2007/2008), he has been quite a hit with the undergraduate students.

When post graduate students are asked what they remember most about Andrew, his professional qualities seem to blur in favour of two things: his blow up kangaroo that found itself in all kinds of different places in the department over the years, and his provision of cake. Cake when Australia won the rugby and cake when South Africa won the rugby. But perhaps even these memories have now been eclipsed by Andrew’s more recent rendition of a kangaroo on the dance floor of the Thicket Forum, in which Andrew has played a fundamental role over the years (although not always as a kangaroo).

Andrew has now taken up the position of senior lecturer in the Department of Conservation Ecology and Entomology at Stellenbosch University, and he will certainly make a huge contribution to that department. In his new post he will be conducting research into the spatial prioritisation of resources for nature conservation and cultural heritage programmes, the ways in which individuals and groups of people make conservation decisions, and social learning and adaptive management.

Although Andrew will be sorely missed by students and staff alike, we feel privileged to have had the opportunity to share his personal and intellectual company for so many years. We wish him all the best in his new post, and congratulate the Department of Conservation Ecology and Entomology on their latest catch. Andrew has a very bright future ahead of him: watch this space!



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