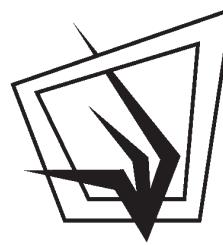


GRASSROOTS

Guest Editor



A guest editorial from the first editor of the Bulletin of the Grassland Society of Southern Africa, musing about how our newsletter has reflected the changing Society over the past two decades.

The morphing of the “Bulletin” into “Grassroots” is a very good example of the adaptability the leadership, of the Society has shown over the years. On the occasion of the 20th year of regular publication of a ‘popular’ format we can reflect on how things have changed – or have they?

Certainly the content is quite different as when we started the “Occasional Publications” and the “Bulletin” the intention was really to get “the science into practice” and to record the good ideas emerging from field days and non-congress events (this was sort of a Journal of Good Ideas and Failed Experiments but ISI didn’t like the idea so we went it alone!). What we could not anticipate was that the publication, now well established as Grassroots, would provide the forum for the development of a new medium that now characterises the programme at the formal Congresses. This has moved us as a Society and discipline into the era of trans-disciplinary agendas and we have maintained our relevance through this I believe. For those who may not have thought about this buzzword here are my definitions:

Multi-disciplinary – many disciplines working on a project and they do not really need to talk to each other;

Inter-disciplinary – as above, but they have to write a joint report so are forced to talk to each other at the end of the project. Usually these ‘studies’

come about where one discipline takes on a project, gets into trouble so find some mates from other disciplines to help; and

Trans-disciplinary –here all possible disciplines (especially those very hard ones we call “soft sciences”!) get together and write the project proposal so they are all in it from start to end.

Of course the last of these is where the GSSA has moved itself to in my view. Whether this was done by accident or design I don’t know, but this is what has and will keep this Society alive. The GSSA and all its elements have done well to survive the changes in the ‘scientific’ environment over the last three decades and I have no doubt that the strength-in-adaptability will prevail.

Oh, by the way, I see from Mike Peel’s Presidential Address (GSSA Congress 2010) that the planted pastures issue remains. That has not changed in 30 years! Perhaps if the debate was taken into a trans-disciplinary realm, things may look different!

Peter Zacharius (PeteZac) has been a member since 1982 (Processional since 1993), served as Honorary Secretary for more years than he can remember from 1985. He was President in 1993 and has served in every portfolio, except Treasure, available at the time he was on Council structures (1985 to 2005) and attended 21 consecutive congresses. Career decisions have distracted him from the veld since 2006 and after a 30 year association with UKZN he is now Chief Operations Officer for the Safe Blood for Africa Foundation. ☺

The Grassland Society of Southern Africa is dedicated to the advancement of the science and practice of range ecology and pasture management.

We welcome any contributions to the Grassroots, in the form of news, informative articles, reports, short research notes, scientific papers and letters to the Editor.

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On the cover: Area B: Stockpiled placement. Photo: Flip Breytechbach

2010 Sustainability Awards and 10th Anniversary of Impumelelo Innovations Award Trust Function at Artscape, Cape Town: May 2010,

N GABRIELS
on behalf of GSSA

I felt really cultured arriving at Artscape on this particular Sunday evening. Light classical music was playing in the reception area and the aroma and aesthetic value of picture food filled the room. There was an air of excitement and expectancy as honorary guests, politicians, prize winners and the rest of the audience filed into the awards venue. The well-known South African comedian, Mark Lottering, was the Master of Ceremonies for the evening. He was very entertaining and managed to make one or two "faux pas" of the evening look as if it was part of the "act". The audience was addressed by Dr Franklin Sonn (Chairperson) and Ms Rhoda Kadalie (Executive Director) of Impumelelo Trust, who stressed the importance and the value of development projects in the townships and rural areas of South Africa. They commended the winners of the 2010 Impumelelo Innovations awards for their hard work, their commitment and their innovations; and the direct impacts of their projects on poor South African communities.

Nine silver, eight gold, four platinum and three social entrepreneur awards were awarded that evening. Winning projects ranged from HIV/AIDS and other health care related projects to literacy, handcraft and music therapy community clinics to greening and recycling projects to mentoring of emerging black farmers. The innovation winners were awarded with certificates and prize money funded by the Ford Foundation, Open Society Foundation of SA, Charles Stewart Mott Foundation and the Konrad Adenauer Foundation.

The projects which were most impressive to me were the Orange Bag Recycling Project from Kwa-Zulu-Natal and the Abalimi: Harvest of Hope - from Seed to Table Project from the Western Cape. The Polokwane Declaration of 2000 prescribed a 50 % reduction in waste to landfill by 2012 and zero waste to

landfill by 2022. In order to achieve this, the Cleaning and Solid Waste Unit of the eThekini Municipality initiated the Orange Bag Recycling Project in August 2007. In partnership with Mondi Paper, the municipality provided orange refuse bags to households in selected areas to be filled only with paper and plastic products. Publicity campaigns were carried out to promote this. Private enterprises collected the bags and took them to Mondi for recycling, thereby reducing the amount of waste taken to landfills. The project was so successful in its pilot stage in the Outer West of Durban, that it has been extended to the Inner West, Durban North and Durban Central. It currently reaches approximately 100 000 homes (60 % of the target). To date, more than 2000 tons of waste has been collected and recycled.

Abalimi Bezekhaya has assisted an estimated 3000 urban poor to "micro-farm" since 1982. In February 2008, Abalimi established Harvest of Hope – from Seed to Table to create a new value chain for farmers from Khayelitsha and Nyanga to sell their produce directly to customers in upper income suburbs through an organic box scheme. This provides a reliable cash income to about 130 farmers. The potential is there for each farmer to earn an estimated R1500 per month, whether realised or not. Abalimi Bezekhaya received an award for his efforts in assisting these small farmers in progressing from survival and subsistence levels of urban farming to a livelihood level where they can earn cash and still produce food for their families.

The audience was rewarded for their patience with classical music and dance performances by the Libertas Choir, Opera singer Musawenkosi Ngqungwana, Hugo Lamprecht Sax quartet, the pianist Eben Wagenstrom and the Jikeleza Feather Dance group. ☺

2010 GSSA Research Skills Workshop

JULIUS TJELELE

Agricultural Research Council, Animal Production Institute

Once again congratulation to the organisers of research skills workshop held in Middelburg, Eastern Cape on the 21 to 22 September 2010. Several speakers discussed fundamental skills required to successfully plan, execute experiments and write scientific papers.

Among other speakers David Ward discussed an interesting talk on “the research question”. This is a vital aspect of research, which is often not given the attention it deserves, and many questions are found to be unanswerable or even already answered in other research.

Most young researchers are faced with dilemma of whether to continue with research or move towards management? Luthando Dziba unpacked this issue effectively and hopefully we will now tackle such challenges carefully to avoid frustration.



Delegates at GSSA research skills workshop.

One message that I took home was that “a scientific experiment, no matter how good the results may be, is not complete until the results are published”. It is now up to the researchers, especially young researchers to practice all lessons learned from the research skills workshop.

We hopefully now know whether we want to pursue research or move towards management, have the required skills to write proposals, learned how to develop research question, design experiments, collect and effectively managed data and write scientific paper.

More scientific papers, papers, papers..... ☺



SA youth warned to protect environment

Pretoria - South Africa, especially the youth, need to take global warming and threats to the environment seriously if the country is to prevent the devastating impacts of climate change. This is according to Deputy Water and Environmental Affairs Minister, Rejoice Mabudafhasi who was speaking at the launch of the Kudu Green School initiative in Pretoria on Wednesday.

"The future of our environment lies in the ability of our youth to understand that the sustainability of our natural environment and ecosystems cannot only be left to existing legislation and policies," the deputy minister said.

The project seeks to rope in school children in Gauteng to be ambassadors in the fight against climate change. Through the initiative, youngsters from selected schools are made aware of the environment and are encouraged to create educational experiences that will change their perspective of climate change. Mabudafhasi said her department, together with other players in the environmental sector, had recently undertaken an initiative to ensure that environmental learning was well articulated and recognised within the newly revised school curriculum.

Several schools on Wednesday were presented with green flags as a symbol of their participation in the fight against climate change.

"An initiative like this one will therefore ensure that learners in urban environments are prepared for future careers in conservation and the natural sciences," Mabudafhasi said. ☺

As hosts of the Congress of Parties on climate change (COP 17) in a year's time, South Africa is under pressure to demonstrate its commitment to reduce carbon emissions, something that can only be achieved through an emigration to cleaner sources of energy.

Mabudafhasi said it was imperative that public awareness on climate related issues be intensified through education and encouraging people to change their attitudes towards the environment.

David Mabunda, Chief Executive Officer at the South African National Parks, said the Kudu Green School initiative was one of the responses to the climate challenge, society was experiencing.

"We are here to commit to sustainability in design and in practice and we want to bring about an increased awareness, appreciation and connection of people to the natural world," he said.

The National Lotteries Board (NLB) has promised to step in and provide funding to various environment-friendly projects across the country.

"If a project has got something to do with protecting the environment, we can provide funding for that," said board chairperson Alfred Nevhuthanda.

The NLB has a distribution of no less than R3 billion in funding to charities and non-profit organisations annually. Trade and Industry Minister Rob Davies has recently instructed the body to spend at least 50 percent of all its discretionary funds on rural organisations whose projects were committed to saving the environment.

BuaNews ☺

SAEON's role in developing the next generation of scientists

R KHASHANE

SAEON Communications Intern

SAEON's education outreach programme had the privilege of hosting its first environmental science education symposium at Silonque Bush Estate in Phalaborwa.

The event attracted environmental education enthusiasts from across the country, comprising of teachers, learners and scientists. Among the guests were Lulekani Education Circuit Manager Tilly Baloyi and the Manager of SAEON's Ndlovu Node, Dr Tony Swemmer.

The symposium created a much needed platform for educators and learners to demonstrate and share their experiences gained as participants in the SAEON education outreach programme. The auditorium was abuzz with excitement as the 55 guests prepared themselves for presentations and discussions. Dr Tony Swemmer opened the proceedings and was followed by SAEON's Education Outreach Coordinator Sibongile Mokoena, who gave an overview of the programme.

"The aim of SAEON's science education is to give teachers and learners curriculum support so that learners are in a position to pursue careers in science," said Mokoena. The SAEON science education outreach programme is creating the next generation of scientist, she added.

The role of the scientist in education

Dr Dave Thompson of the SAEON Ndlovu Node gave a thought-provoking presentation on the role of the scientist in education. He said there is a huge gap between scientists and the curriculum, stressing that the relationship between scientists and the broader community needs to be improved. Thompson noted

that most people who are not involved in the sciences receive most of their information from the media and through teaching by non-scientists. "Scientists need to be responsible educators and non-scientists need to be responsible learners," he added. ☩

All in the name of science

DR. T SWEMMER,

SAEON Ndlovu Node

AND M COLGAN,

PhD student, Stanford University, USA

In these times of concern for the environment and efforts to combat global climate change, planting trees is highly regarded. Cutting down trees is not. However, this is exactly what SAEON's Ndlovu Node has been doing for the past three years. All in the name of science, of course.

Trees play a vital role in the regulation of the flow of carbon and water, between ecosystems and the atmosphere. The amount of carbon stored by trees and the rate at which trees grow and absorb more carbon out of the atmosphere is vital information, both for carbon credit projects and for global climate models that inform society of how our climate is changing (and how much more it is likely to change in future).

In order to provide more of the basic data upon which these complex models are built, the SAEON Ndlovu Node has been "harvesting" trees at a mining site. Harvesting involves making detailed measurements of a tree's dimensions before cutting it down and weighing it. By measuring trunk diameter and matching this with the tree's weight, future estimates of carbon stored in living trees are made at other sites where harvesting is not an option (such as inside Kruger National Park). For selected trees, roots are also dug up to be weighed, as nearly 30-50% of a tree's weight (and carbon) is located below ground.

Harvesting a range of tree species, in different types of ecosystems, is needed in order to make reliable estimates of biomass and carbon stocks over large areas. ☩

Upcoming events

Technical Centre for Agricultural and Rural Cooperation (CTA) 2010 Annual Seminar

Date: 22-26 November 2010

Venue: Johannesburg, South Africa

Email: ctaseminar2010@cta.int

37th Annual Conference of the South Africa Association of Botanists (SAAB)

Date: 17-19 January 2011

Venue: University of Rhodes, Department of Botany

Tel: 046 603 8592

Email: saab2011@ru.ac.za

Climate Change Adaptation in Agriculture and Natural Resources Management

Date: 28 February -11 March 2011

Venue: Eastern Africa

Contact: Manon van Lent

Email: manon.vanlent@wur.nl

South African Association for Laboratory Animal Science Congress 2011

Date: 09-11 March 2011

Venue: Muldersdrift, Johannesburg

Contact: Sonja du Plessis

Email: Sonja@londocor.co.za

5th International Wildland Fire Conference – South Africa

Date: 09-13 May 2011

Venue: Sun City, South Africa

Tel: +27 21 797 5787

Email: info@wildfire2011.org

8th European Federation for Information Technology in Agriculture, Food and the Environment Conference

Date: 11-14 July 2011

Venue: Czech University of Life Sciences Prague

Contact: Eva Cervenka

Email: conference2011@czu.cz

10th African Crop Science Society Conference

Date: 10-13 October 2011

Venue: Maputo, Mozambique

Contact: Luisa Santos

Tel: (258) 2149 2177

Email: acss2011@uem.mz

Postgraduate Opportunity

Applications are invited from potential postgraduate students who would like to continue their MSc or PhD in Animal Nutrition or Pasture Science at University of Pretoria in 2011. The topics of research include:

Animal Nutrition

1. Screening of novel plant materials for their inhibitory effect on rumen methanogenesis.
2. In vitro and in vivo screening of commercial fibrilolytic enzymes in terms of fibre degradation and reducing methane production.
3. Evaluation of drought tolerant alternative fodder crops leaf meals for milk goat production under small scale farming conditions.

Animal/ Pasture Science

1. Uncertainty assessment of greenhouse gas (GHG) emissions from the livestock sector (i) in terms of carbon sequestration and (ii) in terms of methane emission from ruminants using tropical/sub-tropical forages.
2. Manipulation of rainfall and grazing management with the aim (i) to generate data to gain a better understanding of the role of climate change, and (ii) to predict the effect of climate change on forage quality.
3. Modelling climate change impacts on the productivity of pastures and forage crops.

Requirements:

- Qualifications either BSc (Agric) for MSc degree and MSc (Agric) for PhD degree
- Knowledgeable on Animal Nutrition (Rumen fermentation) for registration in Animal Nutrition
- Knowledgeable on Grassland/ Pasture Science/ Agronomy for registration in Pasture Science

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