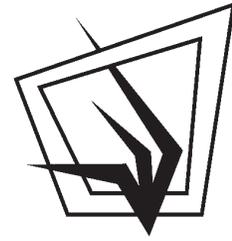


GRASSROOTS

Editor JULIUS TJELELE



Dear Readers

Welcome to the first edition of Grassroots, and to those we haven't talk or met this year, complement of the New Year. I would like to wish you a productive and healthy 2011. It is that time of the year, were we have to prepare abstracts for the up-coming 46th Annual GSSA Congress to be held in Grootfontein Agricultural Development Institute, Middelburg, Eastern cape from the 10 to 15 July 2011. Early preparation of abstracts, research papers or posters will help us maintain or improve the good standard of papers presented in last year's GSSA Congress. Most important, let's not forget to submit our research papers and/or research notes to AJRFS, it is our Journal let support it. We hope you will enjoy this issue of Grassroots.

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GRASSROOTS

February 2011 | Vol 11 No.1

Features

- 6 Profile of the President of Grassland Society of Southern Africa (GSSA)
- 9 Climate change impacts on plants
by VP KHAVHAGALI
- 14 Eco-hydrological changes following grassland degradation in a semi-arid climate
by HA SNYMAN
- 17 The conservation status of temperate grasslands in southern Africa
by C CARBUTT, M TAU, A STEPHENS AND B ESCOTT
- 24 Root studies in a semi-arid climate
by HA SNYMAN

News

- 2 SAEON camp exposes learners to diverse career opportunities in science
by N HAMBAZE
- 3 People, policy and climate change predictions in Mpumalanga: Local solutions for global challenges
by DR D THOMPSON
- 4 Eskom teams up with WRC on water-for-energy R&D
by CREAMER MEDIA REPORTER
- 5 Nedbank acknowledges Diamond Route for its 'many benefits'

Regulars

- 28 46th Annual GSSA Congress
- 28 New Research initiative to improve food security
- 29 Postgraduate opportunities
- 30 Upcoming events

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.

Email jtjelele@arc.agric.za or admin@grassland.org.za or fax +27 (0)86 622 75 76

On the cover: Dr. Sikhhalazo Dube at one of his study sites.

SAEON camp exposes learners to diverse career opportunities in science

N HAMBAZE

Education Outreach Officer, SAEON Elwandle Node

At the official launch of National Science Week in Alice earlier this year, the Minister of Science and Technology, Naledi Pandor re-emphasised the dire need for young Black South African Scientists.

SAEON, together with engineering company Murray & Roberts identified this gap early on and took the initiative to run an education outreach programme that directly addresses the need for young Black South African scientists. Through this outreach programme learners are encouraged to opt for careers in science.

A highlight of the education outreach programme is the annual science camp, which is aimed at equipping learners with the knowledge and skills to apply scientific methodology, and to expose them to a variety of careers and environments in science, engineering and technology. This year's science camp took place at The Willows, a beachfront resort in Port Elizabeth, with 19 of the top science learners from the previously disadvantaged schools in Grahamstown and four from Phalaborwa.

The programme was packed with presentations by experts in the field of science, engineering and technology, visits to various science institutions in Port Elizabeth as well as science experiments. "At Nelson Mandela Metropolitan University we were exposed to microscopes and learned how to use them," commented Mhlahikazi Swartbooi, a Grade 11 learner from Mary Waters High School. "At school we are taught about microscopes and microscopic organisms, but we never get to see or use microscopes," she added.

Monitoring the rocky shores

Learners were tasked with monitoring the rocky shores at The Willows and this exposed them to new scientific skills. "I learned how to identify differ-

ent species and how they are adapted to live on a certain part of the shore," Mhlahikazi said. "I particularly enjoyed the fieldwork because I wish to pursue a career in science one day," said Sanele Nthsingana, a Grade 11 learner from Nathaniel Nyaluza High School.

The objectives of the camp were achieved in that several learners indicated that they were interested in pursuing a career in science and that the camp had made them realise that career opportunities in science, engineering and technology abound.



Learners monitor the rocky shores. Picture: Joe Sibiyi



All life forms observed are identified and recorded. Picture: Joe Sibiyi

SAEON Newsletter 

People, policy and climate change predictions in Mpumalanga: Local solutions for global challenges

DR D THOMPSON
Biodiversity Scientist, SAEON Ndlovu Node

The impacts of climate change are current and more severe than previously thought (IPCC 2007). They pose an increasingly serious risk to ecosystems and ecosystem services, food security and the realisation of sustainable development.

No part of the globe - whether developed or developing; rich or poor - is without impact. In acknowledging the seriousness of climate change, the South African Government approved the framework for the development of a National Climate Change Response Policy in July 2008.

It is against this backdrop that provincial and local governments are responsible for incorporating mandates that deliver on both climate change adaptation (measures taken to reduce the vulnerability of natural and human systems to actual or expected climate change effects, and climate change mitigation (measures to reduce the sources or enhance the sinks of greenhouse gases, into their respective policy frameworks, and to develop appropriate strategies for which they are legislatively responsible (Figure 1). continued on page 4...

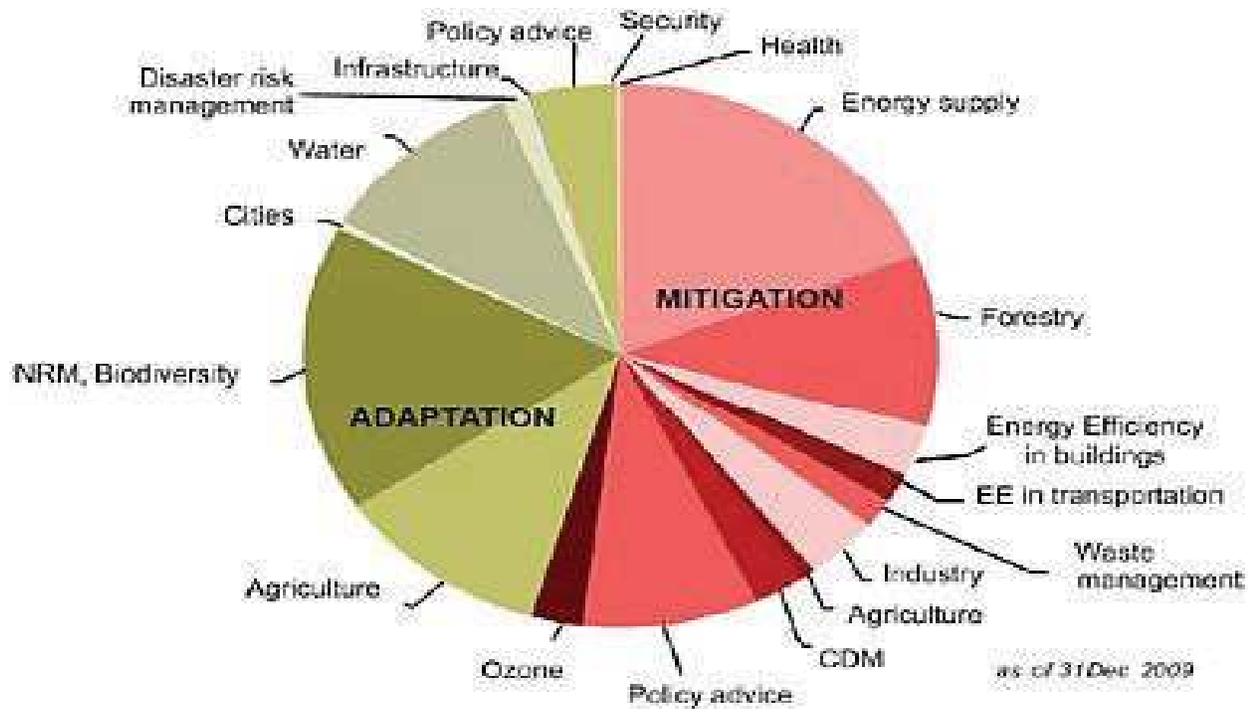


Figure 1. Provincial and local governments in South Africa are required to implement mandates that deliver both climate change adaptation and climate change mitigation strategies. The sector distribution of climate-related projects supported by the German Technical Co-operation (GTZ) reveals the enormous scope and cross-cutting nature of the required response. CDM = Clean Development Mechanisms, NRM = Natural Resource Management. Courtesy of M. Glück, GTZ South Africa.

continued from page 3...

Climate change response strategies

One of the biggest challenges in developing such climate change response strategies, at least during the preliminary phases, is the divide that exists between science and policy. The tragic significance of this 'information gap' is that the majority of people remain unaware, misinformed and therefore somehow removed from the reality of the local and global causes and consequences of climate change.

Recently the author was invited to participate in a number of information-sharing forums organised within the various levels of the Mpumalanga provincial government. The first of these forums was a workshop facilitated by the Mpumalanga Tourism and Parks Agency (MTPA) that brought together experts from various academic (University of Pretoria), research (Agricultural Research Council; Council for Scientific and Industrial Research; SAEON) and governmental agencies (Department of Economic Development, Environment & Tourism; Department of Environmental Affairs; Ezemvelo KZN Wildlife; MTPA; South African National Biodiversity Institute) in order to promote knowledge-sharing and to capacitate the MTPA across the board.

Discussions ranged from defining climate change (as opposed to global warming or global change) and down-scaled temperature and precipitation predictions for Mpumalanga), through the probable impacts on regional biodiversity, to the contribution of the tourism industry to the climate crisis and carbon-stock trading. The author led discussions during which he unpacked the role of scientists in helping to bridge the science-policy gap and outlined the value of education and public participation or 'citizen science' activities in personalising climate change for the man on the street. 🍷

Eskom teams up with WRC on water-for-energy R&D

South Africa's Water Research Commission (WRC) and power utility Eskom have entered into a strategic partnership to fund and jointly research issues relating to energy and water use.

Eskom is a major water consumer and is currently expanding its 40 000 MW-strong fleet by 12 300 MW, which would result in even greater water consumption by 2017.

Divisional executive for corporate services Dr Steve Lennon said that further research was required to ensure that the utility became more innovative in the way it accessed, treated and used water, especially given the expectation of even greater water stress in future, owing to climate change.

WRC CEO Dr Rivka Kfir said that, in light of South Africa's water challenges, it made sense to combine resources in a way that would grow the research capacity pool.

Topics likely to be tackled following the signing of a memorandum of agreement and the formation of a joint research committee include, climate change, water resource availability and accessibility, water quality, operation and maintenance, water conservation and demand management, technology development, excess water and acid mine drainage, residue management, including ash, brine and sludge management, ecosystems and remediation and groundwater impact, as well as vulnerability and remediation 🍷

Creamer Media Reporter

Nedbank acknowledges Diamond Route for its 'many benefits

The Diamond Route was recently recognised by Nedbank for the benefits it offers to a range of people and organisations; including school and university students, mine employees, scientific researchers, local communities and the public.

Judges cited the following as some of the many benefits:

- The creation of 261 permanent jobs;
- Company staff have access to all properties and all staff are familiar with the Diamond Route;
- All properties are open to the public, which benefits national and international tourism;
- The training of 14 cultural and bird guides;
- Some of the properties have been conserved for over 100 years – these areas provide important reference sites which are invaluable for scientific research;
- More than 120 research projects have been conducted to date on the various properties. These relate to mammals, birds, insects, reptiles, amphibians, plants, general ecology and archaeology;
- Benfontein has successfully preserved the most important herd of pure, un-hybridised black wildebeest, which, according to scientists, is the single most important conservation effort that will save these animals from genetic extinction;
- A variety of new insect species have been recorded on the Diamond Route properties, including a new genus;
- Four universities are currently running research projects on the different properties;
- Every year between 10 and 15 school groups from disadvantaged communities visit the reserves and every group receives a full day of environmental education from professionally qualified staff;
- A section of the Ezemvelo Nature Reserve has been donated to the Maharishi Institute to run its Youth Development Programmes;
- An Endangered Wildlife Trust partnership has been established with the Diamond Route, which includes an MOU being signed to utilise facilities at Ezemvelo Nature Reserve and Telperion near Bronkhorstspuit by the Endangered Wildlife Trust's Conservation Leadership Programme.

This programme aims to give practical training to aspiring young conservationists from disadvantaged backgrounds. One of the strongest aspects of the Diamond Route Programme, the citation added, was the partnerships formed with universities, research organisations, NGOs and schools. This extended to research, experiential learning, sound environmental and sustainability management, leadership, organic farming and the provision of learning materials.

The adjudicators were particularly impressed that the Diamond Route extended beyond conservation and research by making the sites accessible to all – thus providing an excellent example of sustainability. 🏆

46th Annual GSSA Congress

Advancing Rangeland Ecology and Pasture Management in Africa - 10 to 15 July 2011

Grootfontein Agricultural Development Institute, Middelburg, Eastern Cape, South Africa

Preliminary Announcement

Deadline for Title submission: 31 March 2011

Deadline for Abstract submission: 29 April 2011

Deadline for Early Bird payments: 31 March 2011

The Annual Congress will be hosted by the Eastern Cape Province at the Grootfontein Agricultural Development Institute in Middelburg. Situated in the foothills of the Renosterberg and surrounded by the characteristic bossies and koppies of the Karoo, Middelburg and Grootfontein have a long history in the field of agriculture. The Agricultural College was established in 1911 and so is celebrating its centenary during 2011. The Grassland Society is honoured to be included in the calendar of events of this special year!

Organisers of special sessions, symposia, workshops, etc. are encouraged to publish contributions in a special issue of the African Journal of Range and Forage Science. Remember that page charges for all papers published in 2011 by members of the Grassland Society of Southern Africa will be ZERO!!

Several special sessions, symposia and workshops are being organised in addition to the standard sessions. Further details will become available over the coming weeks BUT if you would like to submit an idea, please do so as soon as possible.

Further details of the Congress including tours, registration procedures, preliminary programme and planned symposia will follow shortly with the First Announcement. Please diarise the dates and include in your annual budget!! Estimated registration is R3000 per delegate excluding accommodation but including 2012 membership. Early bird rates will be included with the First Announcement. 📧

New Research initiative to improve food security

Major international research initiative launched to improve food security for developing countries

In a unique and important move to harness science to improve food security for millions of people in the developing world, research funders from the UK and USA and government departments in the UK and India announced a new £20M/\$32M joint research initiative.

The new initiative will fund teams from the UK, India and developing countries to work on research projects to improve the sustainability of vital food crops. The research will particularly investigate ways to improve the disease-resistance and stress-tolerance of staple crops in sub-Saharan Africa and South Asia.

Funding will be awarded to teams that can show that their research can improve food security and increase sustainable crop yields within the next 5-10 years.

Over one billion people globally are already undernourished and food security is a major issue with the world's population forecast to reach nine billion by 2050. Environmental change, new trading patterns and urbanisation are all expected to increase pressures on food security in coming years.

The new initiative is being managed by the UK Biotechnology and Biological Sciences Research Council (BBSRC). The £20M fund is made up of contributions from BBSRC, the Bill & Melinda Gates Foundation (through a grant to BBSRC), the UK Department for International Development and the Indian Department of Biotechnology.

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Research Fellowship MSc bursary

The purpose of the continence research fellowship is to support increased dissemination of continence research knowledge by offering an opportunity and funding to visit, observe and train with a renowned continence research team.

Special requirements:

The trainee must propose a fellowship that encompasses state-of-the-art research not available in his or her institution or country.

Length of fellowship:

From two weeks to three months

Amount:

Travel and living expenses would be funded:

Travelling expenses: up to £1800

Accommodation: up to £400 per week (up to £4800 maximum)

Per diem: up to £50 s / day (£4200 maximum)

The applicant will be responsible for all healthcare costs and/or any other costs other than those stated in the application. The applicant is responsible for obtaining travel documents, visas, and any other relevant documentation required for his or her entry and stay in the host country.

Application Procedure:

Obtain application from: www.icsoffice.org/Awards-fellowship, please send to awards@icsoffice.org

CV

Rationale for support form

Confirmation of status letter

Completed host institution form (if applicable)

Special requirements (if applicable, see fellowship details) 

MSc bursary available worth R45000.00 for 2011 at the North-West University Potchefstroom Campus, Department of Botany.

Title: Genetic biodiversity of the pan tropical grass vetiver (*Vetiveria zizanioides* (L.) Nash)

Study leaders Dr Sandra Barnard and Prof Johnnie van den Berg.

Interested persons with a molecular biology background please contact Dr Sandra Barnard at:

sandra.barnard@nwu.ac.za

Cell: 0824301772 

Upcoming events

South African Association for Laboratory Animal Science Congress 2011

Date: 09 -11 March 2011

Venue: Muldersdrift, Gauteng

Contact: Sonja du Plessis

Email: Sonja@londocor.co.za

International Rangelands Congress 2011

Date: 02 - 08 April 2011

Venue: Rosario, Argentina

Email: secretariatAOC@rangelandcongress.com

South African National Seed Organisation Congress 2011

Date: 04 – 05 May 2011

Venue: Western Cape Hotel and Spa

Contact: Manon van Lent

Email: manon.vanlent@wur.nl

5th International Wildland Fire Conference – South Africa

Date: 09-13 May 2011

Venue: Sun City, South Africa

Tel: +2721 797 5787

E mail: 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 Cervenkova

E mail: conference2011@czu.cz

10th African Crop Science Society Conference

Date: 10-13 October 2011

Venue: Maputo, Mozambique

Contact: Luisa Santos

Tel: (258) 2149 2177

E mail: acss2011@uem.mz

10th African Crop Science Society Conference

Date: 10 – 13 October 2011

Venue: Maputo, Mozambique

Email: acss2011@uem.mz

Tel: (258) 2149 2176

7th International Wildlife Ranching Symposium

Date: 10 – 14 October 2011

Venue: Kimberly

Contact: Glaudin Kruger

Email: kruger@kruger-associates.com 



VELD MANAGEMENT

AFRICA LAND-USE TRAINING is presenting a 2-day course on grass identification and veld management. The two days can also be attended separately . . .

DETAILS

Venue: Pretoria Botanical Garden **Date:** 10 – 11 March 2011

Cost: Day 1 - R 650.00 / person } Whole course – R 1 000.00 / person
Day 2 - R 500.00 / person }



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