

**Publication Editor:** Pieter Swanepoel  
pieters@elsenburg.com  
Tel: +27 44 803 3726

**Assistant Publication Editors:**  
Janet Taylor  
Keletso Mopipi

---

**Administrator:** Freyni du Toit  
**Admin Assistant:** Barbara Styan  
**Layout & Design:** Cathrine Versfeld

---

**President:** Tony Palmer  
**Immediate Past President:** Igshaan Samuels  
**Vice-President:** Leslie Brown  
**Honorary Secretary:** Michelle Tedder  
**Honorary Treasurer:** Justin du Toit  
**Scientific Editor:** James Bennett  
**Public Relations Officer:** Melvin Swarts  
**Chairperson - Trust:** Rina Grant  
**Chairperson - PAC:** Leslie Brown  
**Chairperson - COC:** Kevin Kirkman  
**Additional Member PRO:** James Puttick  
**Website Editor:** Paul Gordijn  
**Co-opted Member Fundraising:** Wayne Trutter

**Printed by:** LT Printers—Pietermaritzburg

**Published & Distributed By**  
The Grassland Society of Southern Africa

**Website**  
[www.grassland.org.za](http://www.grassland.org.za)

# Contents

## Congress News

5 Report on The 49<sup>th</sup>  
Annual Congress of  
the GSSA

12 Farmer Awards 2014

16 Feedback from the  
Liaison Workshop:  
Pastures, Seeds and  
Fertilizers

## Regulars

4 Editor's Note

45 Council News

49 New and Resigned  
Members

## Members

46 In Memorium

## Features

32 Eat More Meat and  
Save the World: The  
Latest Implausible  
Farming Miracle

37 Why Restoring  
Wetlands Is More  
Critical Than Ever



Arnold Griesel

## News

- 20** Introducing Rural Children to Real and Relevant Environmental Issues
- 22** Africa's Sluggish Data Collection Needs a Revolution
- 24** SAEON – Keeping a Scientific Eye on Sustainable Development
- 37** SACNASP 2011 to 2014 What a Way We Have Come
- 31** Pasture Courses on Outeniqua Brings Research to Farmers

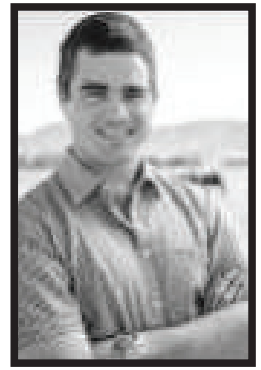
## Journal Summary

- 44** Herbaceous Biomass - Species Diversity Relationships in Nutrient Hotspots of a Semi-arid African Riparian Ecosystem

## Journal News

- 42** Online access to African Journal of Range and Forage Science Papers
- 43** African Journal of Range and Forage Science Best Paper, 2013

# Editor's Note



**W**elcome to the fourth issue of Grassroots for 2014. The 49th Grassland Society of Southern Africa Congress held at the Philip Sanders Resort outside Bloemfontein was of the best.

Congratulations and thanks to Paul Malan and the organising committee for arranging such a wonderful Congress. This Grassroots issue contains reports, feedback and photos of the congress.

After many years, the debate about Allan Savory's theory on holistic management of veld, and its remarkable stocking rates and the system's ability to reduce desertification and reverse climate change, continues. Is there enough scientific evidence to support his theories? Read more about this controversial issue herein and feel free to send us your comments.

These are only a taste of what you'll find in this exciting issue of the Grassroots, the last issue for this year. As this year draws to an end, we wish you a happy festive season and a prosperous 2014. Happy reading!

*Pieter Swanepoel*

# Introducing Rural Children to Real and Relevant Environmental Issues

Liesel Hein  
Arid Lands Node - SAEON

**N**ever has the urgency for understanding and predicting the consequences of our actions on the natural environment been as important as for this generation. Many human developments change hydrology and soil chemistry. One such example is the release of sewage effluent into the surrounding environment, a common practice in Karoo villages. Wolwekraal Nature Reserve, north of Prince Albert, falls within the Succulent Karoo Biome and has an average annual rainfall of 165 mm. Since 2009, the illegal drainage of sewage effluent from a municipal wastewater treatment facility onto the reserve has led to changes in the plant communities affected by the effluent.

Species composition in arid and semi-arid plant communities reflects long-term patterns in the timing and quantity of rainfall. Change in resource availability (water, nutrients, light) is likely to change the plant community composition, structure and function. Sewage effluent both saturates the soil and changes soil chemistry. Changes in these elements could alter competitive advantages from water-efficient arid plants to production-efficient plants, and could alter interactions with fauna.

## Resource and community changes

Recent investigations by school learners

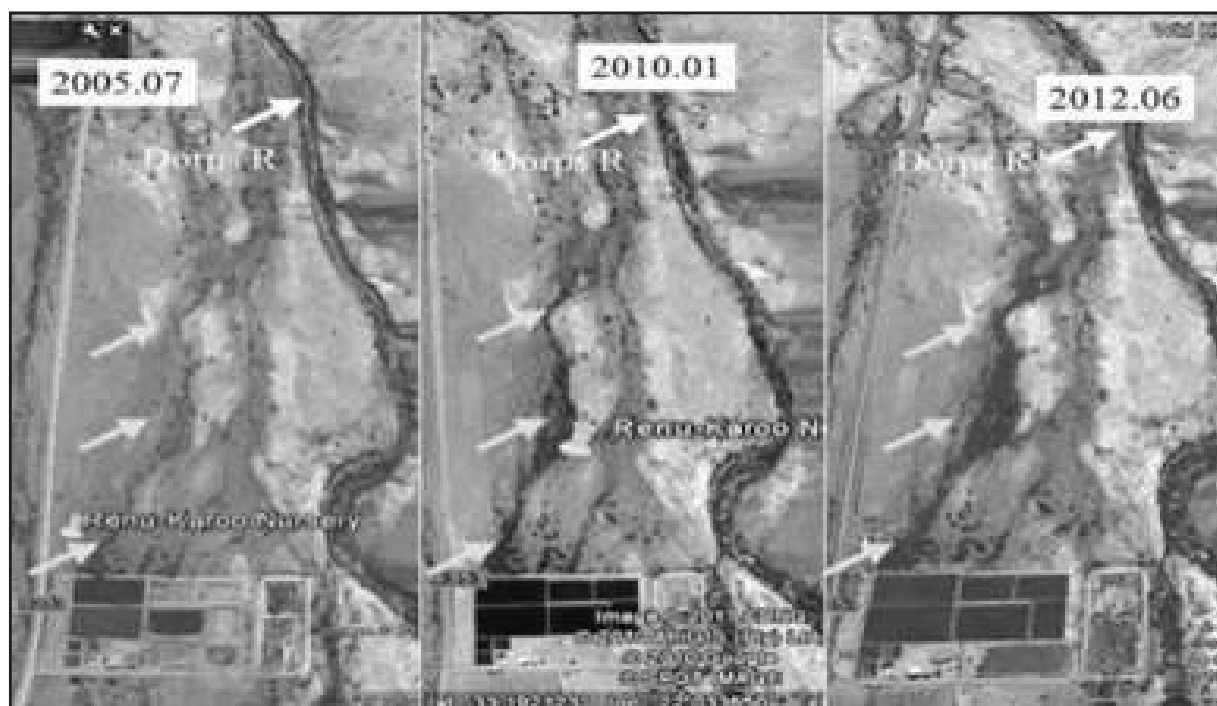
and university students confirmed such resource and community changes associated with the effluent found within the reserve. Many species of fauna have taken advantage of the changed habitat. For example, Karoo bush rats (*Otomys unisulcatus*) populations have increased within the dense reed and gannabos (*Salsola spp.*) growth, some frog species have colonised the stream, and there is evidence that predators such as snakes, mustellids, feral cats and dogs have moved into the area to hunt the abundant prey.

These observed changes have led to a proposed investigation by SAEON and Renu-Karoo into how plant life forms from a semi-arid Karoo environment respond to increased rainfall, flooding and nutrient enrichment. The objective of the proposed study is to quantify growth, flowering, seed production and insect herbivory of three plant growth forms – the succulent *Malephora lutea* (springbokvygie), grass *Fingerhuthia africana* (vingerhoedgras), and shrub *Lycium cinereum* (kriedoring) – across a sewage effluent gradient. Relationships between these attributes and soil moisture, pH and conductivity will be determined. This study is an opportunity to foresee the possible consequences of increased soil moisture and nutrient availability and its application in environmental management.

## Inspiring the future custodians of our natural world

Children are the future custodians of our natural world and consequently it is important to inspire them concerning its values and their associated responsibilities from an early age. As part of a SAEON training programme which aims to promote scientific education within local communities, Professor Sue Milton (co-director of Renu-Karoo and SAEON collaborator), Liesel Hein (SAEON intern), Ivy Bruintjies, Marai Isaacs and Mercia Loots (all of Renu-Karoo), guided 138 Grade 5 science learners through the local Prince Albert wastewater treatment works and the adjacent Wolwekraal Nature Reserve to learn about the water cycle and the effects of water on desert vegetation. The learners deliberated about important

problems concerning the consequences of the intrusion of sewage water on plant and animal communities, the resulting threat to the health of the nearby Dorps River running through the reserve, and how the local plant communities used their abilities to compensate for these changes in habitat. The dynamic interactions and dependencies between the water cycle, plants and animals were demonstrated with the use of live examples within the reserve. Plant community properties and how these relate to the semi-arid environment and the effluent intrusion were also demonstrated all along the length of the sewage stream. The young learners grasped many important ecological concepts, which is promising for the future generation to achieve breakthroughs towards a more environmentally-conscious and greater society.



Satellite images visually illustrate change in vegetation over time owing to the intrusion of sewage effluent. In 2005, the sewage dams had not yet reached capacity and in 2012 sewage dams were working above capacity. (Image provided by SJ Milton)

---

## Africa's Sluggish Data Collection Needs a Revolution

Sci Dev Net Global

---

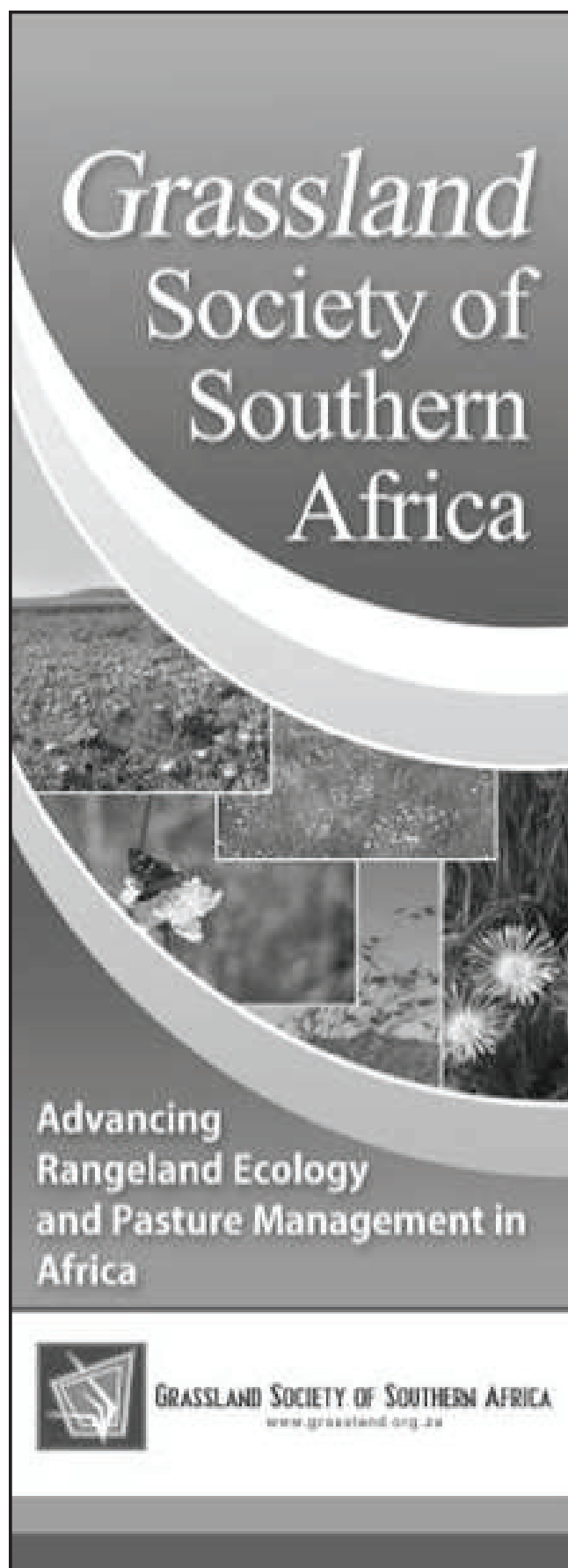
**D**onors and countries in Africa need “revolutionary” changes to turn the tide on “bad data”, as well as to insulate data from politics, according to a report on the data revolution in Sub-Saharan Africa. “Nowhere is the need for better data more urgent than in most African countries, where data improvements have been sluggish,” says the final report of the Data for African Development Working Group, published this month (8 July). Funding for data collection is often unstable and inadequate, data accuracy is rarely checked, donors’ priorities sometimes overtake national ones, and national statistical offices lack incentives to improve, says the working group, co-chaired by the Center for Global Development and the African Population and Health Research Center. Although data collection is happening — more than 80 per cent of African countries conducted a census between 2005 and 2014 — the report states there is a “paucity of reliable data” on key indicators of development such as maternal mortality.

And it adds that the early efforts have been “focused on collecting more — not necessarily better — data”. “This may divert attention from the underlying problems surrounding production, analysis, and use of basic data that have inhibited progress to date,” it says. Themba Munalula, a member of the working group

and head of statistics at the Common Market for Eastern and Southern Africa, a free trade area, says there is a lack of demand for data producers to monitor quality. “There is a need for some kind of performance-based approach to make national statistics offices (NSOs) incorporate quality into their products,” he says. The report highlights that the work of NSOs can be affected by politics and donor influence, and that there are still political incentives to “keep data hidden”. The report says “it is hard to insulate data from politics”, and that “for political reasons, there are incentives to suppress or misreport certain national-level data. Examples include inflation and census data, especially where population size is used for budget allocation and allocation of parliamentary seats.” These factors together with donor priorities that do not match local government needs mean that “NSOs lack incentives to improve national statistical capacity or prioritize national data building blocks, leaving core statistical products like censuses and vital statistics uncollected for years”. “Perverse incentives can cause intentional manipulation, suppression, or misreporting of data for political or institutional gain,” it says. “Both donors and countries need to do something truly revolutionary to address these core problems underlying bad data in the region,” the report says.

It suggests that NSOs should therefore have more independence from government and donors. Munalula believes that NSOs can achieve functional autonomy. “In many instances, these agencies need restructuring; they require more professional staff and better facilities. The real challenge is whether governments will be willing to provide more funding as the NSOs change and improve.” The report points to the need for free, publicly-available data as the end goal for a data revolution within Sub-Saharan Africa. “Open data is not about taking the politics out of government, it is about making the politics more visible and helping people make decisions”, says Liz Carolan, international development manager at the Open Data Institute, in London, United Kingdom.

“However, public administrations are sensitive to risk, and releasing data can make leaders feel exposed,” Carolan adds. “With open data, they fear three things: criticism of data not being high enough quality; unwittingly enabling breaches of national security or personal privacy; and losing the power that comes from holding a monopoly on information.” Governmental anxieties aside, opening up data should not yet be the primary concern in Africa, insists Munalula. “Improving the production system — the compilation and dissemination of statistics — is the priority,” he says.



‡



---

## SAEON – Keeping a Scientific Eye on Sustainable Development

Johan Pauw  
Managing Director - SAEON

---

The importance of water in South Africa is growing from all three perspectives of sustainable development, namely its ecological, economic and political realms. Folk songs have long underlined that enough clean water is essential for society to survive and prosper. One in particular reprimands children for playing in the water because adults need drinking water (*Kinders moenie in die water mors nie...* an old Afrikaans song). Population growth means that more people will need more water and this is also linked to a general increase in living standards following the onset of democracy in 1994 and the expansion of services to impoverished communities. The industrial demands on water come from the need to grow agricultural production, and an explosion of mining activities, urbanisation and up-market developments like golf estates. A *ceteris paribus* view would therefore emphatically confirm that the demand for water is increasing.

Where this water will come from in the future is far less certain and the cause of much debate. Some argue that we have enough water for many decades to come, others say that we simply need to limit wastage and use water more efficiently.

### Climate change and water

The uncertainty of climate change is a major factor. Irrespective of whether this change is seen in the amount, pattern or variability of rainfall, we need to understand how the natural systems which deliver the water we use are going to respond. How will catchments and river ecosystems be affected by changing climatic regimes? How valid will the “ecological reserve” concept remain under conditions of extreme weather patterns? Many more questions may be asked on how the ecological systems supporting water delivery will be affected and the consequences for society. SAEON has therefore developed an observation approach to ecohydrology through which we will endeavour to keep a scientific eye on the main drivers of water production in catchments. This has led us to re-establish the streamflow monitoring programmes at Jonkershoek and Cathedral Peak. This monitoring is supported by vegetation monitoring, weather stations and eddy-covariance flux towers to further understand the processes that may be driving a change in the water cycle.

Relatively undisturbed upper catchments allow us to uncover the real impacts of climate change on our water resources.

The sophisticated instrument arrays that we are developing, will provide unique datasets that will support decision making on water resources into the future. The research associated with these datasets is already developing capacity in scarce skills through the student research that is being undertaken. To support this increasing focus on the water cycle, SAEON is now looking forward to appointing a hydrometeorologist to lead the ecohydrology programme. These projects benefit from financial support from the Natural Resource Management branch of the Department of Environmental Affairs, the Applied Centre for Climate and Earth System Science (ACCESS) and the Department of Science and Technology.

### **United Nations Sustainable Development Solutions Network**

With the National Research Foundation (NRF) and the South African Government being committed to sustainable development through a range of contributions and policies, the NRF has been approached by the United Nations Sustainable Development Solutions Network (UN-SDSN) to assist in the establishment of a regional network. Considering the role that SAEON is playing at many levels towards achieving sustainable development, the NRF nominated SAEON to lodge an application for the establishment of the regional SDSN in southern Africa. The plan is for SAEON to host a coordinator and a secretariat through which all the southern African players can be given a forum for discussion and the development of initiatives to

advance solutions to problems preventing sustainability. We are presently awaiting the outcome of our application. More information about the SDSN may be obtained from [www.unsdsn.org](http://www.unsdsn.org).

### **Free online course on sustainable development**

In the interim, we have the pleasure of advertising a free online course on sustainable development. The course will be presented by the renowned economist Jeffrey Sachs and will be based on his latest book: *The age of sustainability*. The course starts on 9 September and students who finish the course on 5 December will receive a free electronic copy of the book. The signup page is <http://www.sdsnedu.org/home>. Jeffrey has written: "The world has undertaken to conclude negotiations on three great topics by the end of 2015: the new Sustainable Development Goals (SDGs), a new framework for global sustainable development financing, and a new climate change agreement! During the course, we will discuss all of these major negotiations, and have several opportunities for live web chat interactions together, including Q&A." I trust that many of you will join me and hundreds of others around the world on the course. SAEON has once again received an unqualified audit from the Auditor-General of South Africa, whose audit is performed in accordance with the International Standards on Assurance Engagements (ISAE) 3000. Thanks is due to Dr Amani Saidi who, as Operations Manager, has overseen the financial management processes of SAEON.



The sophisticated instrument arrays that SAEON is developing, will provide unique datasets that will support decision making on water resources into the future.

# SACNASP 2011 to 2014 - What a Way We Have Come

## Press Release

The organisational structure within the SACNASP office has changed tremendously over the past three years. The Council, which was inaugurated in 2009, brought with it changes and a new philosophy, and these fundamental changes were evident as the Council embarked on the road of transformation. SACNASP has worked towards ensuring greater inclusivity in its mission to empower all those registered with the fold. These fundamental changes enabled SACNASP to manifest itself as a professional body, thus creating a federation of professionals from many Fields of Practice. As the fundamental changes were implemented, so too were various changes made with respect to the requirements for primary degree compositions – to ensure that SACNASP adapted to modern trends.

In place of the Education Committee, SACNASP formed a Qualifications Assessment Committee, and also adopted certain continuous professional development (CPD) policies – these will be discussed later on. In April 2011, the Council made the decision to appoint me as the executive director. Shortly thereafter, we began to see a marked increase in the prominence and sphere of influence of SACNASP.

Since my appointment in 2011, we have seen a noticeable increase with regard to the creation of new categories of registration. From 2009 to 2014, we have now included the following:

- Specialist Natural Scientist
- Professional Natural Scientist
- Candidate Natural Scientist
- Certificated Natural Scientist (Level A)
- Trainee Certificated Natural Scientist (Level A)
- Certificated Natural Scientist (Level B)
- Trainee Certificated Natural Scientist (Level A)
- Associate Natural Scientist
- Student Natural Scientist

In addition, we have included four new Fields of Practice (Water Resource Science, Toxicological Science, Extension Science and Geospatial Science), as well as two new voluntary associations (the National Institute for Explosives Technology and the Wetland Society of South Africa).

### **Continuous professional development**

The rollout of the continuous professional development (CPD) policy at SACNASP is being done with the help of an outsourced company, CPDonDemand. Mr Johan van Schalkwyk and Mr Johan

Pienaar, consultants at CPDonDemand, have helped SACNASP to draft policies and forms relating to the new CPD programme. Various meetings have been held during the draft phase to action changes to the existing SACNASP policy. The policy has been drafted, and the forms required by different stakeholders are ready. CPDonDemand, have helped SACNASP to draft policies and forms relating to the new CPD programme. Various meetings have been held during the draft phase to action changes to the existing SACNASP policy. The policy has been drafted, and the forms required by different stakeholders are ready.

We conducted a workshop on the CPD policy on 15 May 2014 for Environmental Sciences. Members from the following five organisations attended: the SA Wetland Society, the Environmental Assessment Practitioners of South Africa (EAPASA), the South African Association of Botanists (SAAB), the South African Institute for Engineering and Environmental Geologists (SAIEG) and South African Institute of Aquatic Scientists. They were all positive about the new CPD programme. On 20 June 2014, Messrs Van Schalkwyk and Pienaar presented SACNASP's new CPD policy to the executive committee of the South African Society for Animal Sciences (SASAS). Mr Van Schalkwyk also presented the CPD system at SASAS' AGM on 7 July 2014, which sparked further interest. The Geological Society of South Africa (GSSA) is developing CPD for geologists, and we are looking into how best to link this to SACNASP's system. As always, when launching a new system/policy, we have

been receiving many queries regarding our CPD system from industries in the Fields of Practice mentioned above. Please remain patient, as details on what you may need to do will be communicated as and when required.

### **Where to from here?**

It is evident that SACNASP has undergone some incredible and very positive changes over the past three years. With staff numbers growing, registration numbers increasing, demographics changing and the positivity experienced around our new Fields of Practice, we can only sit back and marvel at what we have achieved. We will not, however, simply sit back and relax now. We are continually working on ways to better our practices, streamline our processes, and more proactively serve and support those registered with us. In light of this goal to always strive for excellence, we will ensure that we further strengthen our communication channels with you, our stakeholders. We are also continuously working to improve on the Act that was introduced in 2003. We do realise that the Act is difficult to implement, and are working towards changing it so that it will be easier to comprehend, as well as easier to enforce. Even though we have seen tremendous improvements as a result of our marketing activities, we will continue to drive our marketing efforts to increase awareness around SACNASP, the various Fields of Practice and the work that we do here. I do believe that the more we promote the SACNASP name, the easier it will be to maximise the number of

registrations. As I discussed previously, the CPD rollouts have been met with much enthusiasm, and we will continue to roll these out in the fields of Geology, Animal Sciences and Environmental Science. One of our future goals is to specifically target students. More and more, we are finding that many students entering universities or other tertiary institutions are calling out for the support and guidance of our professional body. We are working towards achieving this goal in the next two to three years, and we will keep you posted about this. We will continue to add more Fields of Practice to our list and will monitor trends within the various fields, ensuring

that we are always up to date with market trends. As we receive requests from applicants to join us, we will develop respective new Fields of Practice, depending on the needs of South Africa. At the end of the day, the SACNASP name is respected and credible, and I believe that is a true reflection of the exceptionally high standard of talent – registered scientists – who we have with us, as well as our phenomenal staff and personnel. SACNASP will do everything it can to persist with broadening its sphere of influence.

“Even though we have seen tremendous improvements as a result of our marketing activities, we will continue to drive our marketing efforts to increase awareness around SACNASP, the various Fields of Practice and the work that we do here.”



---

## Pasture Courses on Outeniqua Brings Research to Farmers

Janke van der Colf, Western Cape Department  
of Agriculture, Outeniqua Research Farm,  
George  
jankevdc@elsenburg.com

---

**T**he Outeniqua Research Farm near George is one of seven research farms of the Western Cape Department of Agriculture. Outeniqua recently hosted three of their popular annual pasture courses. The courses included an advanced pasture course from 13-14 August and two beginner pasture courses presented in Afrikaans and English, on 4 September and 10 September, respectively. The purpose of these pasture courses is to train pasture managers and advisors in how to successfully and sustainably manage planted pasture in the southern Cape. The content of each course is based on research conducted on the Outeniqua Research Farm over the past 60 years and presented by a multi-disciplinary team of some of the top research scientists in their respective fields in South Africa.

The two pasture courses for beginners, attended by 35 individuals in total, were specifically aimed at providing training and information to smallholder farmers, pasture managers and any other individuals in need of a basic introduction to pasture management. The course consisted of practical presentations given on existing pastures and interactive demonstrations on the use of common pasture management tools.

The course structure was based on the same logical approach recommended optimal pasture management, namely the integration of the management of soil, pasture and animal factors. Attendees were first introduced to the management of soil and soil health, with a specific focus on correct soil sampling for pastures and the benefits of no-tillage. Afterwards, different grass and legume species and their role within a fodder flow program, the basic principles related to grazing interval and intensity, pasture measurement and irrigation management were presented. Some of the highlights included practical demonstrations of how to take a soil sample using different apparatus, the correct use of a rising plate meter for pasture measurement and a display of no-till methods used to oversow kikuyu. The day was concluded by presentations on management of dairy cows on pasture based systems and a visit to calf-rearing trials.

Filled to capacity at 40 attendees, the advanced pasture course provided producers and industry representatives with the newest research and technology whereby to maximise the profitability and sustainability of dairy production from planted pastures. The course was opened

by Dr Philip Botha with an introductory presentation on the interaction between dry matter production, forage quality, palatability and intake of pasture and how it will impact on the production per animal and per hectare within a pasture based system.

Dr Botha also provided a foundation on which all preceding presentations on pasture were based by highlighting the baseline factors that would impact pasture production potential such as soil characteristics, fodder-flow planning, irrigation and grazing management. Pieter Swanepoel presented key findings from his ground-breaking soil quality research on pastures in the southern Cape, providing course attendees with recommendations on how to sustainably manage soil physical, chemical and biological properties to promote soil health. Janke van der Colf discussed the strategic selection of species and cultivars within a fodder flow program and how to strategically over-sow kikuyu pastures. Ilze Fourie, a post-graduate student based on Outeniqua,

gave a presentation on her unique research aimed at evaluating the production potential of kikuyu over-sown with lucerne. Prof Robin Meeske provided important information on concentrate supplementation to promote the profitability of milk production from pastures, the correct procedures to make silage and calf rearing in pasture based dairy systems.

The advanced research currently being conducted on Outeniqua Research Farm aims to develop new and adapt existing information to improve farming efficiency of the dairy-pasture producing region of the southern Cape. Scientists at Outeniqua Research Farm realise the complexity of producing milk from planted pasture. They also understand the importance of sound integrated management of the soil, plant and the animal. It is important for them translate their scientific findings into practice. In the light of this, the annual pasture courses presented at Outeniqua were a huge success, providing an excellent opportunity for local producers to interact with the researchers and receive training based on scientific principles.





---

# Eat More Meat and Save the World: The Latest Implausible Farming Miracle

George Monbiot  
The Guardian

---

Allan Savory tells us that increasing livestock can reduce desertification and reverse climate change – but where is the scientific evidence?

**I**t doesn't matter how often miracles are disproved; our willingness to believe in them remains undiminished. Miracle cures, miracle crops, miracle fuels, miracle financial instruments, miracle profits: the continued enthusiasm for these claims reflects the triumph of hope over experience. Here's another one: a miracle technique that allows us to reconcile our insatiable demand for meat with the need to protect the living planet. Better still, it proposes, eating meat could actually save the biosphere. A TED talk which makes this claim has been viewed 2.6m times. Over the weekend in London, the author of this talk, Allan Savory, convened an international conference, in which a long list of speakers lined up to insist that his methods have been vindicated. I was intrigued by his TED talk, in which he screened astonishing before-and-after pictures purporting to show the transformative impacts of his technique. Savory maintained that without grazing by livestock, grasslands turn to desert. He claimed that he had reversed desertification by raising the number of cattle and goats by 400%, grazing them intensively for short bursts in small paddocks and then moving them on.

By this means, he said, the hooves of the animals break up what he calls the "cancer of desertification": the crust of algae that forms on bare soil in dry areas. Breaking it up, he claimed, encourages the growth of grass. By trampling vegetation and coating it with manure, the livestock produce a mulch that ensures the soil absorbs and retains more water. As a result of this transformation, we can do something astonishing: We can take enough carbon out of the atmosphere and safely store it in the grassland soils for thousands of years, and if we just do that on about half the world's grasslands that I've shown you, we can take us back to pre-industrial levels while feeding people.

I can think of almost nothing that offers more hope for our planet, for your children, for their children and all of humanity. Savory's grazing technique, which he calls "holistic management", could, in other words, reverse not only desertification but also climate change – while permitting us to keep consuming vast quantities of meat. No wonder it has been received with such enthusiasm.

I would love to believe him. But I've been in this game too long to take anything on trust – especially simple solutions to complex problems. So I went to the library and started reading. A large number of academic papers have been published in response to his claims, testing them by means of experimental and comparative studies. The conclusion, overwhelmingly, is that his statements are not supported by empirical evidence and experimental work, and that in crucial respects his techniques do more harm than good.

A new review of experimental results, in the journal *Agricultural Systems*, has this to say about Savory's claims that his intensive rotational grazing (IRG) can regenerate grassland: The vast majority of experimental evidence does not support claims of enhanced ecological benefits in IRG compared to other grazing strategies, including the capacity to increase storage of soil organic carbon ... IRG has been rigorously evaluated, primarily in the US, by numerous investigators at multiple locations and in a wide range of precipitation zones over a period of several decades. Collectively, these experimental results clearly indicate that IRG does not increase plant or animal production, or improve plant community composition, or benefit soil surface hydrology compared to other grazing strategies. Another review article, in the *International Journal of Biodiversity*, found that grazing by livestock in arid places is more likely to destroy grass and other vegetation than to protect it: Published comparisons of grazed and ungrazed lands in the western US have found that rested sites have larger and more dense grasses, fewer weedy forbs and

shrubs, higher biodiversity, higher productivity, less bare ground, and better water infiltration than nearby grazed sites.

Among these sites was a ranch in Arizona whose vegetation, Savory had claimed, had become "moribund" and increasingly sparse since grazing there had ceased. In reality, there has been a massive increase in both plant cover and plant diversity on this site since the livestock were removed. As for the claim that the algal crust is the "cancer of desertification", it appears to be just the opposite: a rich, diverse and ancient ecosystem in its own right, that stabilises the soil, increases organic matter and absorbs water. These crusts are "fragile, highly susceptible to trampling, and are slow to recover from trampling impacts. Loss of these crusts results in increased erosion and reduced soil fertility". Overall, it concluded: "Ecologically, the application of holistic management principles of trampling and intensive foraging are as detrimental to plants, soils, water storage, and plant productivity as are conventional grazing systems."

So what exactly do Savory's dramatic pictures of transformation show? As they are uncaptioned and not linked in his presentations to scientific studies, it's hard to tell. Many factors affect the way vegetation changes in arid places. Do these shifts really depict the results of the application of his techniques, or something else entirely?

As for the claim that holistic management can reverse the build-up of carbon dioxide in the atmosphere, according to RealClimate.org, he's wrong by orders of magnitude. Just to balance current carbon emissions, the uptake of carbon by all the world's vegetation (not only grasslands) would have to triple. But Savory says he can go beyond that, and his technique can bring atmospheric carbon "back to pre-industrial levels". As RealClimate puts it: "science tells us that this claim is simply not reasonable." Far from grazing helping to store carbon, holistic management seems to have the opposite effect: the evidence strongly suggests that livestock reduce carbon storage rather than raising it. In terms of total greenhouse gas emissions, the intensive grazing of cattle on grasslands can be even worse than producing them in feedlots. While Savory was in London, I managed to secure a telephone interview with him, to ask him about these challenges. It did not go well. He began by comparing himself to Galileo, which is never a good sign, and it went downhill from there. I have learnt to be suspicious of people who give long, distracting, irrelevant answers to simple questions. Apart from Ian Plimer, I have never come across anyone who does it to greater effect.

I asked him about that ranch in Arizona, and the claim that he was diametrically wrong about what had happened to the vegetation once grazing had ceased. He launched into a long disquisition about a court case in Namibia. After several attempts I at last managed to break in, to remind him I'd asked about a ranch in Arizona. It was as if he registered the name of the state and nothing else: he

started talking about the quality of the state's scientists, its rifle ranges and its tortoises. I asked him about his carbon claims. He told me it wasn't him who had made such claims, but other people who knew far more about it than he did. Could he give me the names of those people? He gave me a long, rambling answer about the different impacts of land management around the world, climate change, fire, poverty, violence, red meat and veganism. I tried and tried again. At last I managed to bring him round to the question, and extracted some names from him. So where had they published their calculations? They hadn't.

His staff later sent me an article on the issue published on the Savory Institute's website, but - as far as I can tell - nowhere else. There are no named authors. If you intend to make a massive and extraordinary scientific claim, and build your position around it, you had better ensure that it has been properly tested, which is why the peer review process exists. Broadly, however, his theme was that what scientists were studying was not the entirety of holistic management, but only one aspect of it:

It's like having a plane that flies that lands on three wheels, and we've only had wheelbarrows or tricycles for centuries and so people are studying the tricycle and saying well it's got three wheels, and we cannot make it fly; it can't fly. How come the plane can fly when it's also got three wheels? Savory referred me to a paper he'd written, which he said, explains the science and methodology of holistic grazing.

This paper (again apparently unpublished except on his website) explained the lack of scientific support for his claims as follows:

Holistic management does not permit replication. Because of this fact we can only validate the ‘science’ used and monitor or document ‘results achieved’. Note: This point is critical to understanding the great difficulty reductionist scientists are experiencing trying to comprehend holistic planned grazing – because no two plans are ever the same even on the same property two years running, planned grazing cannot be replicated which reductionist scientists do to try to understand the ‘science.’ It then contended that: The only independent assessment of all available critics and their citations was done by Chris Gill. Gill, involved in management and with a liberal arts education, studied every citation he could locate and who in turn those authors cited. As he reports not a single paper discrediting Holistic Management actually studied, or even attempted to study, holistic planned grazing.

Unfortunately Savory gives no reference for this assessment. In the academic literature, I’ve been unable to find a paper on the subject by anyone called Gill. Elsewhere, all I have been able to locate is a three-page magazine article by Gill, reproduced on Savory’s websites. It contains no references, no data and no links to any experimental or empirical research. If this is “the only independent assessment of all available critics and their citations” that Savory will accept as valid, I think it might tell you something about the substance of his claims.

It all reminds me, I’m afraid, of the way in which certain evangelists for alternative medicine operate. For example:

- Savory maintains that it’s not the claims that are wrong but the scientific process by which they are assessed. (In one interview he says: “you’ll find the scientific method never discovers anything.”)
- He claims that “reductionist science” doesn’t understand what holistic management involves, which is why it fails to measure the outcomes properly. But, as Adam Merberg points out, his account of what holistic management means appears inconsistent and poorly defined, which “allows Savory to blame any failures on a misunderstanding of the method.”
- As scientific studies don’t produce the results he wants, he relies instead on testimonials.
- He diagnoses normal conditions as deadly pathologies (“the cancer of desertification”) then claims to have found a cure for them.
- He makes claims about his techniques which are not only implausible but appear to be scientifically impossible.

It seems to me that there’s a fairly solid rule, that applies to almost any question: what you want to believe is almost always wrong. If something sounds too good to be true, that’s because, in nearly all cases, it is.



Cattle walk an arid landscape in Texas. 'Holistic management' claims to halt desertification while allowing the continued consumption of meat. Photograph: D.J. PETERS/AP

## Why Restoring Wetlands Is More Critical Than Ever

Bruce Stutz  
Environment 360

Along the Delaware River estuary, efforts are underway to restore wetlands lost due to centuries of human activity. With sea levels rising, coastal communities there and elsewhere in the U.S. and Europe are realizing the value of wetlands as important buffers against flooding and tidal surges.

The work began at low tide on the Mispillion marsh on Delaware Bay. A field team hauled coconut fiber logs the size and heft of rolled carpets out beyond the tall cordgrass to the grey mud flat that extended from the marsh edge. Ten or so yards out, where the mudflat met the open water, an array of gray stacked blocks made of marine limestone and oyster shell was already set out. Looking like the battlements of a buried castle, this permeable reef was designed to deflect and dissipate the energy of the bay's water as it flows toward the marsh.

If it works, this project will forestall further erosion of the existing marsh, whose banks are being undercut and washed away. This will allow new sediment to build up behind the coco-fiber "biologs" that were staked onto place to form the new marsh edge, a "living shoreline" that is the latest effort to protect and restore Delaware Bay's tidal wetlands. Like coastal wetlands around the world, they are in urgent need. Once considered wastelands, wetlands were diked to create

grazing and farm lands — in Europe for the last 2,000 years, in North America for the last 400. More recently they were dredged for shipping channels, sprayed and ditched for mosquito control, and exposed to nutrient and pollution runoff from upland agriculture and to sediment from upstream development. Finally recognized for their biodiversity, for providing productive nursery habitat for fish and shellfish and feeding grounds for migrating birds, wetlands gained a worldwide recognition with the 1971 international Convention on Wetlands in Ramsar, Iran. The next year the U.S. enacted the Clean Water Act, which gave wetlands such as those along the Delaware the protection of law.

Yet despite government, NGO, and regulatory efforts, wetland losses continue unabated. In the U.S., for instance, even with a "no net loss" policy in place, between 1998 and 2009 coastal wetland losses increased from 60,000 to 80,000 acres per year. In the Delaware Bay, where Danielle Kreeger, science director of the Partnership for the Delaware

Estuary, was overseeing the construction of this “living shoreline,” tidal wetlands are being lost at the rate of an acre a day, this in the East Coast's second-largest estuary, where 126,000 of its 400,000 acres of wetlands are considered by the Ramsar Convention to be of international importance. Rising global sea levels and temperatures will only increase these losses. “As sea level rise [now 4 millimeters (mm) per year in Delaware Bay] reaches 10 mm per year, things could begin to become bleak,” says Kreeger. “By 2100 the Delaware could lose 91 percent of its wetlands. So the question is, how much do you need to have in the bank to keep it all from going under?”

In Delaware Bay, as in estuaries around the world, the search is on for any kind of hedge against future losses of coastal wetlands. This sense of urgency also comes from a new understanding of the value of wetlands: Coastal communities, faced with increasing storm activity and flooding, have realized that wetlands may provide the only real protection from floodwaters and ever higher tidal surges that can overwhelm once-protective embankments, bulkheads, and sea walls. Scientists have discovered over the last few years that sea grass beds, salt marshes, and mangroves sequester and store far more carbon than equal areas of tropical forest. And because most of this “blue carbon” is stored in submerged soil, it is released far more slowly than carbon stored in forest vegetation. If all goes well with the Mispillion living shoreline installation at Milford, Delaware, sea grasses will take root in the new sediment, and masses of ribbed mussels will cling to the roots and filter the water as they feed.

Where abundant enough, ribbed mussels can filter all the water that comes through a marsh on any single tide. Kreeger considers these “super bivalves” key to effective marsh restoration in the Delaware estuary – key, in fact, to the estuary’s water quality and ecology. In the channels of the new marsh, young fish and shellfish will find shelter and food. On the limestone and oyster shell reef, a new oyster bed will form and spread. The elevation of the restored marsh will increase, enough to keep pace with the rate of sea level rise. And the wetland’s store of sequestered carbon will be secured for thousands of years to come. Hopes are high for such living shorelines, not only in the Delaware estuary. In Alabama, “100-1000” is a partnership of NGOs, government agencies, and private businesses formed to attempt to restore the oyster reefs, seagrass beds, and coastal marshes of Mobile Bay. For every mile of “living shoreline,” they expect to protect some 10 acres of intertidal habitat: 100 miles of living shoreline will restore 1,000 acres of marsh and seagrass. Judy Haner, marine program director for The Nature Conservancy in Mobile, who is one of four 100-1000 administrators, says she hopes the project will encourage private landowners, who own 80 percent of the Mobile Bay coastline, to quit building sea walls and bulkheads and build living shorelines instead. To make the transition easier, the Mobile District of the U.S. Army Corps of Engineers has developed a living shoreline permit. In Maryland, the law now requires that before anyone can build a bulkhead or sea wall they have to demonstrate that a living shoreline wouldn’t be a viable alternative.

There are problems, however, that a living shoreline won't solve. Along many Delaware estuary wetlands, a 300-year history of dikes, ditches, and channels left a legacy of degraded wetlands, suffering dysfunctional hydrologies, and invaded by phragmites, a poor substitute for the native cattails and grasses. Restoring the natural water flows will be key to efforts on such marshes. This is the major issue in Europe where coastal wetlands have been diked for at least 2,500 years. In the Netherlands, for instance, along the Wadden Sea, farmers have for centuries grazed cattle on land created by raised embankments that blocked the sea. In fact, there's not a salt marsh along the Wadden Sea's 300-mile coastline that's older than a hundred years. Restoration efforts, therefore, have begun with either the natural collapse of the embankments or with their removal; success will depend on how the land is reshaped when once more exposed to the tidal flow. Work by Jan P. Bakker of the University of Groningen suggests that one of the larger problems may be re-establishing the biodiversity of salt marshes so long gone.

Restoring the hydrology to long-diked marsh was the issue when, as part of its Salem, New Jersey, generating station's federal Clean Water Act permit, Public Service Gas & Electric was required to protect fish nursery habitat among thousands of acres of Delaware Bay tidal wetlands. The utility company took a historical approach to restore or preserve some 20,000 acres of salt marsh on both the New Jersey and Delaware shores of the estuary. "We looked at still natural — or at least less manipulated — marshes, looked at the vegetation mix, the hydrology, and

attempted to bring that back," says Brenda Evans, the company's senior environmental specialist, who has worked on the project since its inception in 1994. Phragmites, she says, were a huge challenge and only herbicides finally reduced the dense stands. But getting the hydrology right was key to the restoration efforts. On the 3,000-acre marsh project in the Alloways Creek watershed in Salem County, N.J., it was the hydrology that controlled the sedimentation, the salinity, and the return of native vegetation.

After nearly 20 years the marsh appears very like the reference marshes after which it was modeled. It also appears secure. "After Hurricane Sandy, as far as the restored marshes were concerned, you couldn't even tell a storm had been through," she says. But Evans has seen the effects of sea level rise on the marsh. "You can see the migration of seawater upland. Increased flow is increasing sedimentation, the marsh elevation is rising, and we're seeing transitional vegetation at the marshes' upland edges." This last is not a bad thing. One of the keys to maintaining restored tidal wetlands is allowing them the room to migrate inland and upland. Living shorelines only address the water side of the marsh equation. One of the estuary's largest marsh complexes, the Milford Neck Conservation Area, has a dynamic, extensive, and somewhat distressed hydrology. Owned by the state of Delaware, Delaware Wild Lands, and The Nature Conservancy, these 10,000 acres of beaches and salt marshes are vital to the Delaware Bay's migratory bird population as well as the ancient horseshoe crabs that arrive in the bay to mate



en masse each spring. “By restoration we don’t mean returning to some pre-colonial state,” says Brian Boutin, The Nature Conservancy’s program director in Delaware. “What we’re looking for is a healthy marsh, resilient to conditions today and in the future.” The process begins with a study of the hydrodynamic and salinity regimes. “Once we figure out how the marsh is functioning, we’ll come up with restoration alternatives to reestablish the tidal flows and restore habitat for striped bass, white perch, weakfish — the charismatic [Delaware] Bay species.”

What’s needed, too, is open upland into which the marsh can migrate. “Otherwise, with sea level rise, we’ll get choked out,” says Boutin. Even the small 1,250-acre Hamilton-Trenton-Bordentown marsh in New Jersey, the Delaware’s northernmost tidal freshwater wetland, has the added buffer of 1,700 publicly-owned upland acres.

The marsh is hemmed in by towns and suburbs and crossed by highways and rail lines, but preservation efforts by Friends of the Marsh and the Delaware and Raritan Greenway Land Trust have managed to maintain a vital biodiversity in rare freshwater tidal habitats that include stands of wild rice, tree-lined swamps, and upland thickets of mountain laurel and rhododendron. Everyone working on tidal wetlands restoration agrees that each project requires long-term monitoring. Sometimes there are pleasant surprises. “Near Tinicum [on the Delaware in Pennsylvania],” says Kreeger, “phragmites had pushed all the cattails and wild rice out of the freshwater tidal marsh. They were gone. And then Hurricane Floyd hit in 1999. It somehow knocked back the phrag, and the wild rice returned. Somehow it was there in the seed bank all along. And it’s still doing nicely.” “Sometimes you just open the right channels,” says Evans. “The water flows, and nature just takes care of rest.”



Delaware Bay is the second largest estuary on the U.S. East Coast.



This is a healthy marsh in the Milford Neck Conservation Area on Delaware Bay. Marshes need the meandering creeks and ponds seen here, and the hummocks (the dark gray areas) are important resting and roosting areas for migratory birds. (Photo credit: Delaware Wild Lands)

## Council News

Dr Michelle Tedder  
University of Kwazulu-Natal  
tedder@ukzn.ac.za

Almost three months have flown by since our Annual General Meeting held on 22 July at Phillip Saunders Resort and Conference Centre just outside Bloemfontein. The highlights of the AGM were some changes to the GSSA Council and the GSSA Trust, some news from the journal and a bid for Congress 51. Igshaan Samuels handed over the reins as President to Tony Palmer. Leslie Brown was elected as the new Vice-President and Justin du Toit was re-elected as Honorary Treasurer. The new office bearers were also elected. Michelle Tedder has taken over from Yolandi Els as Honorary Secretary. Paul Gordijn has come on board as Website Editor and Melvin Swarts as Public Relations Officer. Rina Grant has taken over from Chris Dannhauser as the Chairperson of the GSSA Trust and she will be assisted by trustees Wayne Truter, Cobus Botha, Sikhhalazo Dube, Mary Masafu, Erika van Zyl and Neil Macleod. News from the journal is that starting in 2015 four issues a year will be published and in 2015 one of these issues will be a special issue focussed on planted pastures. Pieter Swanepoel presented a bid to host Congress 51 in the Garden Route region and suggested the NMMU Saasveld Campus or the Wilderness Hotel and Resort as venues. Members supported his bid and selected the Wilderness Hotel and Resort as their preferred venue. The final council meeting for 2014 was held on 17 October at the University of Kwazulu-Natal, Pietermaritzburg Campus. Much positive feedback was received regarding Congress 49, particularly regarding the success of the

rangeland commons policy dialogue group and the industry liaison session. The council also continues to focus on mentorship and development with projects focusing on developing the writing skills of young academics and introducing high school learners to the discipline. As is to be expected much of the meeting centered on planning for Congress 50. The congress will run from 20 to 24 July 2015 and will be held at the Royal Agricultural Society (RAS) Show Grounds in Pietermaritzburg, the birthplace of the society. In 1965 a committee consisting of Professor John D Scott, Dr Pieter de V Booyesen, Dr Trevor D Steinke and Mr John Lintner proposed the development of a Grassland Society. In February 1966 a congress for all interested parties was held at the Faculty of Agriculture at UKZN and 96 delegates, including Neil Tainton, Peter Edwards, Pete Booyesen, Pierre Theron, Rob Drewes, Derek Scotney, Aubrey Venter and Winston Trollope attended. The society has since grown to over 400 members and the RAS Show Grounds is a large venue that can house the large numbers of delegates we hope this special congress will attract. The congress will again run back-to-back with the Research Skills Workshop and Short Course on Fire Management in South Africa as these were so well received at Congress 49. For the congress itself in addition to the standard sessions, several special interest symposia and sessions are being planned that will review key advances in the last 50 years of grassland science in southern Africa, and offer previews of new directions for the future.

## Online access to African Journal of Range and Forage Science Papers

Lester Isaacs  
Sales and Marketing Manager  
NISC

The entire archive of the *African Journal of Range and Forage Science* has been retrodigitised and the text of each article is fully searchable. In addition, all articles now have DOIs, reference linking and citation tracking through CrossRef.

Most relevant higher education and research institutions in South Africa subscribe to the *African Journal of Range and Forage Science*. To find out if your institution has access to the journal simply go to [www.tanfonline.com/tarf](http://www.tanfonline.com/tarf) from within your institution's network. Should you not have access to the journal, contact your librarian to learn if your institution has a subscription, or alternatively email any queries to [journals@nisc.co.za](mailto:journals@nisc.co.za).

Online access for most South African institutions goes back as far as 1997, as this is the standard subscription offering available. Some institutions have access to the full archive and this number is anticipated to grow in 2015, as NISC has started including the archive in their discounted subscription options. In the interim, however, there is real benefit in using your member's subscription. All members receive access to the entire journal archive back to 1966. In addition, using your member's subscription access enables you to access the journal outside your institution's network.

The best way for members to check if they have access is to go to [www.tanfonline.com](http://www.tanfonline.com) and click on "sign in", then click on "forgot password". If you have been set up for access, you will be able to go through the password recovery process via your GSSA-registered email address. You can then go to [www.tanfonline.com/tarf](http://www.tanfonline.com/tarf) and sign in to get access. Anyone who is not registered on the site or whose access is not set up as required can contact the Freyni du Toit ([info@grassland.org.za](mailto:info@grassland.org.za)) to resolve the problem.



## African Journal of Range and Forage Science Best Paper, 2013

Dr James Bennett

Editor-in-Chief

African Journal of Range and Forage Science

Voting for the best paper in *African Journal of Range and Forage Science* in 2013 was undertaken earlier this year in time for the award to be made at the GSSA congress in July. The voting was, perhaps unsurprisingly, dominated by papers from the special issue on Rangeland Commons and the clear winner was Susi Vetter's 'Development and sustainable management of rangeland commons – aligning policy with the realities of South Africa's rural landscape'. This is fitting as it was the position paper for the special issue, which defined the socio-ecological context for the debates responded to in the subsequent papers. There were some really positive comments: 'A really solid position paper, which captured the main lines of argument about the management of the rangeland commons in South Africa very effectively.' ; 'Well considered and sets the standard for an important debate. Raises key issues that demand (and have received) responses. Well written.' ; 'This paper is quite unique as it provides a position on how communal rangelands should be used and managed taking into consideration all relevant factors. It provides a transdisciplinary understanding of how communal rangelands function and addresses the shortcomings of the model which the current Range and Forage Policy of South Africa is based on,' ; '...a masterful summary of the issues on SA rangeland commons which kicked off a really good issue.'; 'Wide-ranging, thorough, sophisticated and well-argued state-of-

the-art review of the rangeland commons, by a world authority on the subject, who demonstrates a keen understanding of the many issues.'

Voting was not exclusively limited to papers from the special issue, and second place deservedly went to Snyman, Ingram and Kirkman's review article '*Themeda triandra*: a keystone species'. This study provided a very comprehensive and insightful review of the species and its contribution is eloquently captured in one assessor's summary of the paper: 'This study....provides a completely new perspective on this well-researched species. The review incorporates appropriate studies which were performed using leading technology or methods. The authors' quality of thinking to address or identify the research needs is fresh, clear and goes beyond the obvious. This review was written with exceptional attention to detail.' Honourable mentions might also be given to Palmer and Bennett's 'Degradation of communal rangelands in South Africa: towards an improved understanding to inform policy' and Bennett's 'Institutions and governance of communal rangelands in South Africa', which finished joint 3<sup>rd</sup> on the voting list (no bias here of course!). Many thanks to all those who contributed papers during 2013 and to those involved in the voting process.

# Herbaceous Biomass - Species Diversity Relationships in Nutrient Hotspots of a Semi-arid African Riparian Ecosystem

Van Coller, H.1, Siebert, F.1

Unit for Environmental Sciences and Management, North-West University, 1 Potchefstroom Campus, South Africa. Correspondence to: Frances Siebert  
Current address: Environmental Sciences and Management, North-West University, Private Bag x6001, Potchefstroom, 2520, South Africa.

e-mail: Frances.Siebert@nwu.ac.za

**DOI: 10.2989/10220119.2014.951394 .**

---

**D**ifferent biomass levels effect herbaceous, i.e. grass and forb, species diversity in various ways. The link between diversity and energy in ecosystems suggest a positive relationship between biomass and diversity. However, the intermediate disturbance hypothesis predicts highest species richness at intermediate levels of biomass / disturbance, and low species numbers in habitats with the lowest and highest biomass / disturbance levels. Sodic patches form an important part of savanna ecosystems, and are deemed 'nutrient hotspots', since they produce high quality forage and nutritional benefits for sustained body condition and reproduction. Because of this, sodic patches are generally overgrazed and often appear disturbed.

The impact of biomass reduction on herbaceous diversity is unknown for nutrient hotspots. As presence and/or absence of herbivores effect biomass levels, we tested the relationship between biomass and herbaceous diversity in sodic sites using the Nkuhlu exclosures, Kruger National Park.

They provide a gradient of grazing intensities, in turn yielding various biomass levels ideal for testing biomass diversity relationships. Results show that a biomass threshold of 2500 kg/ha exists for the sodic zone. Above this threshold, i.e. in herbivore absence, the relationship between biomass and diversity stabilized. Below the threshold, i.e. in herbivore presence, a hump-shaped relationship exists between diversity and biomass.

Therefore suggesting that under- or overgrazing below the threshold results in lower herbaceous diversity, and that higher levels of diversity is maintained at intermediate levels of herbaceous biomass. Since the primary mandate of the Kruger is to conserve biodiversity in all its facets and fluxes, a better understanding of the relationship between biomass and herbaceous species diversity in sodic patches, will contribute to successful conservation and management.



## Council News

Dr Michelle Tedder  
University of Kwazulu-Natal  
tedder@ukzn.ac.za

Almost three months have flown by since our Annual General Meeting held on 22 July at Phillip Saunders Resort and Conference Centre just outside Bloemfontein. The highlights of the AGM were some changes to the GSSA Council and the GSSA Trust, some news from the journal and a bid for Congress 51. Igshaan Samuels handed over the reins as President to Tony Palmer. Leslie Brown was elected as the new Vice-President and Justin du Toit was re-elected as Honorary Treasurer. The new office bearers were also elected. Michelle Tedder has taken over from Yolandi Els as Honorary Secretary. Paul Gordijn has come on board as Website Editor and Melvin Swarts as Public Relations Officer. Rina Grant has taken over from Chris Dannhauser as the Chairperson of the GSSA Trust and she will be assisted by trustees Wayne Truter, Cobus Botha, Sikhhalazo Dube, Mary Masafu, Erika van Zyl and Neil Macleod. News from the journal is that starting in 2015 four issues a year will be published and in 2015 one of these issues will be a special issue focussed on planted pastures. Pieter Swanepoel presented a bid to host Congress 51 in the Garden Route region and suggested the NMMU Saasveld Campus or the Wilderness Hotel and Resort as venues. Members supported his bid and selected the Wilderness Hotel and Resort as their preferred venue. The final council meeting for 2014 was held on 17 October at the University of Kwazulu-Natal, Pietermaritzburg Campus. Much positive feedback was received regarding Congress 49, particularly regarding the success of the

rangeland commons policy dialogue group and the industry liaison session. The council also continues to focus on mentorship and development with projects focusing on developing the writing skills of young academics and introducing high school learners to the discipline. As is to be expected much of the meeting centered on planning for Congress 50. The congress will run from 20 to 24 July 2015 and will be held at the Royal Agricultural Society (RAS) Show Grounds in Pietermaritzburg, the birthplace of the society. In 1965 a committee consisting of Professor John D Scott, Dr Pieter de V Booyesen, Dr Trevor D Steinke and Mr John Lintner proposed the development of a Grassland Society. In February 1966 a congress for all interested parties was held at the Faculty of Agriculture at UKZN and 96 delegates, including Neil Tainton, Peter Edwards, Pete Booyesen, Pierre Theron, Rob Drewes, Derek Scotney, Aubrey Venter and Winston Trollope attended. The society has since grown to over 400 members and the RAS Show Grounds is a large venue that can house the large numbers of delegates we hope this special congress will attract. The congress will again run back-to-back with the Research Skills Workshop and Short Course on Fire Management in South Africa as these were so well received at Congress 49. For the congress itself in addition to the standard sessions, several special interest symposia and sessions are being planned that will review key advances in the last 50 years of grassland science in southern Africa, and offer previews of new directions for the future.