



50th Congress of the Grassland Society of Southern Africa



Congress programme summary

Time	Final programme events		Venue
Monday 20 July 2015			
18:00	Meet and greet and introductory talks		Hall 6
Tuesday 21 July 2015			
09:00	Plenary (Kevin Kirkman)		Hall 6
10:30	Tea		
11:00	Session 1: Veld productivity and quality (Igshaan Samuels)	Hall 6	Session 4: Communal range I (Brigid Letty) Hall 7
13:00	Lunch		
14:00	Session 2: Vegetation change (Tony Palmer)	Hall 6	Session 5: Communal range II (Susi Vetter) Hall 7
16:00	Tea		
16:30	Session 3: Research proposal posters	Hall 8	Session 6: communal range posters Hall 8
17:00	Annual General Meeting		
19:00	Dinner		Hall 8
Wednesday 22 July 2015			
09:00	Plenary (Ian Rushworth)		Hall 6
09:50	Session 7: Bush encroachment I (Ntuthuko Mkhize)	Hall 6	Session 9: Wildlife (Beanélrí Janecke) Hall 7
10:30	Tea (hall 8)		
10:50	Tea (hall 8)		
11:00	Session 8: Bush encroachment II (Julius Tjelele)	Hall 6	Session 10: General poster viewing Hall 8
12:00	Tours		
18:00	GSSA History		Hall 8
18:30	Journal Special Issue launch		Hall 8
19:00	Dinner		Hall 8
Thursday 23 July 2015			
09:00	Plenary (Michelle Tedder)		Hall 6
10:00	Tea		
10:30	Session 11: HRM Special Session I (Ian Little)	Hall 6	Session 15: Pasture posters viewing Hall 8
11:00			Session 16: Pastures I (Derryn Harris) Hall 7
13:00	Lunch		
14:00	Session 12: HRM Special Session II (Ian Little)	Hall 6	Session 17: Pastures II (Sigrun Ammann) Hall 7



Time	Final programme events	Venue
15:00	Session 13: WWF workshop I (Augustine Morkel) Hall 6	
16:00	Tea	
16:30	Session 14: WWF workshop I I (Augustine Morkel) Hall 6	Session 18: Pastures III (Erika van Zyl) Hall 7

Congress organising committee

Chairperson	Kevin Kirkman
Secretary	Michelle Tedder
Scientific committee chairperson	Peter Scogings
Additional Members	Michelle Keith
	Sindiso Chamane
	Erika van Zyl
	Ian Rushworth
	Cobus Botha
	Janet Taylor
	Stuart Demmer

Grassland Society of Southern Africa: 2014/15 Council

President	Tony Palmer
Immediate Past President	Igshaan Samuels
Vice President	Leslie Brown
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Chairperson of Congress organising committee	Kevin Kirkman



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Awards

Platform adjudication guidelines

Each year the Society awards a medal and certificate for the **Best Presentation** and for the **Best Presentation by a Young Scientist**. Congress delegates are asked to help in this process by judging the platform presentations. The primary objective of these awards is to encourage and promote the standard of presentation of papers at the Congress. Platform presentations are expected to last for no more than 15 minutes and the audience and presenter are then provided with a five minute question and answer period. **The Norman Rethman Planted Pastures Award** will be judged by an appointed panel of adjudicators.

To qualify for the Best Presentation by a Young Scientist award, the presenter should meet one of the following criteria:

- be under the age of 35 at the start of the Congress, or
- have given seven or less presentations at prestigious scientific meetings, or
- have done seven or less years of work in the respective discipline associated with their presentation.

NB: Any person wishing to be considered for the Best Presentation by a Young Scientist award should enter their name with the Congress administrator before the start of the Congress

Session chairs should preferably appoint the adjudicators for the presentations in their session several hours before the session begins. Each platform presentation should be adjudicated by as many judges as possible, but session chairs should appoint **at least four judges per presentation**. Completed adjudication sheets should be collected by the session chair following the session and handed to the Congress administrator for data entry purposes.

Adjudicators give a value (1-10) to each of four questions. Considerable guidance is provided here to try to reduce variation. Additionally, judges are asked to indicate whether the subject of the presentation lies within their own interests. These values should provide some interesting patterns that will help us to be fairer in following years. Space is given for general comments about the presentation and these may be used in the case of a tie occurring but also to provide general feedback to the presenters. An example of an adjudication sheet follows on the next page.

Poster Adjudication Guidelines

An award is also given to the **Best Poster** on display during the Congress. Congress delegates are asked to assist in judging this award according to certain criteria which are given on the adjudication sheet. Posters will be accompanied by a three minute oral presentation which should summarise the important points presented on the poster. Two minutes are allocated to a brief question and answer session. **The Best Research Proposal Poster** will be judged by an appointed panel of adjudicators.

Session chairs must appoint the adjudicators for the presentations in their session several hours before the session begins. Each poster should be judged both BEFORE the oral presentation begins, i.e. before the session starts, and during the oral presentation. Each poster presentation should be adjudicated by as many judges as possible, but session chairs should appoint **at least four judges per presentation**. Completed adjudication sheets should be collected by the session chair following the session and handed to the Congress administrator for data entry purposes.

Essentially a poster should convey its primary message concisely, preferably within a three minute reading time. Adjudicators give a value (1-10) to each of four questions relating to the physical poster and to one question relating to the oral presentation. Considerable guidance is provided here to try to reduce variation. Additionally, judges are asked to indicate whether the subject of the presentation lies within their own interests. These values should provide some interesting patterns that will help us to be fairer in following years. Space is given for general comments about the presentation and these may be used in the case of a tie occurring but also to provide general feedback to the presenters. An example of a poster adjudication sheet follows after the platform adjudication sheet.

NB: Please note that adjudication results are sent to presenters following the end of the Congress – so positive and constructive comments are encouraged!



GSSA Annual Congress platform presentation score sheet

Session Name:		
Presentation Title:		
Presenter Name:		
One	The speaker's interaction with the audience was (CIRCLE YOUR SCORE):	
A	Worse than I'd expect at this congress (no eye contact, stood with back to audience, did not speak audibly, etc)	2 1
B	Slightly below average – the speaker was not too bad, but needs to work on presentation skills.	4 3
C	Normal – I'd expect most presentations to be of this quality	6 5
D	Slightly above average – not a perfect presentation, but enjoyable	8 7
E	Better than I'd expect at this congress (the speaker had a very good rapport with the audience)	10 9
Two	The quality of the visual aids was (CIRCLE YOUR SCORE):	
A	Worse than I'd expect (too little/much information, too many/few, writing too small, pictures/graphs unclear, etc.)	2 1
B	Slightly below average – visual aids were not bad, but could use some work.	4 3
C	Normal – visual aids were understandable and supportive, and what I'd expect.	6 5
D	Slightly above average – visual aids on average were as I'd expect, but some of them stood out nicely	8 7
E	Better than I'd expect (the visual aids supported the presentation but did not distract the viewer, were exciting, gave me ideas on how I should structure visual aids in future)	10 9
Three	The supporting evidence (data, case studies, reviews, etc.) was (CIRCLE YOUR SCORE):	
A	Worse than I'd expect (too few data to draw conclusions, inappropriate analysis of data, omission of other important studies, poorly explained, over-complicated)	2 1
B	Slightly below average – the evidence generally held together, but there were some problems	4 3
C	Normal – the conclusions were supported by evidence and I understood what was going on	6 5
D	Slightly above average - similar to most presentations, but some of the information was particularly valuable	8 7
E	Better than I'd expect (complex ideas presented clearly, appropriate and interesting graphs, thorough reviews of other studies, clear link between data, theory and conclusions)	10 9
Four	The overall value to the congress of this presentation was (CIRCLE YOUR SCORE):	
A	Low (the talk did not contribute significantly to the session; perhaps should have been presented as a poster)	2 1
B	Slightly below average – valuable, but perhaps not to this audience, or the quality was a bit below average	4 3
C	Normal (this is the type of presentation I'd expect at this congress)	6 5
D	Slightly above average – similar to most other presentations, but more presentations should emulate this one	8 7
E	High (this contributed more than most other presentations)	10 9
Five	The subject of this presentation is (TICK ONE):	
A	Relatively foreign to me – many of the issues that are being discussed fall outside my experience and interests	
B	Relatively familiar to me – while I do not consider myself an expert in this field, I have an interest in the subject	
C	My area of direct interest – I am highly familiar with the subject, and I have direct experience in this field	
GENERAL COMMENTS RELATING TO THIS PLATFORM PRESENTATION:		



GSSA Annual Congress poster presentation score sheet

Session Name:		
Poster Title:		
Presenter Name:		
One	The length and detail of the poster were (TICK ONE):	
A	Too brief and lacking in detail	
B	Just right – I could read and understand it in 3 minutes or less	
C	Too busy, took too long to read and understand	
Two	Poster presentation, i.e. colours, font size, use of graphs and pictures, etc. was (CIRCLE YOUR SCORE):	
A	Terrible – this poster gave me a headache, and I could not work out what was going on	1 2
B	Below average – I could see what was going on, but some editing would really have improved things	3 4
C	Average – most of the posters at this congress have this quality presentation	5 6
D	Above average – fonts, colours, and pictures are well presented, and allow rapid appraisal and understanding	7 8
E	Spectacular - this should be used as an example of how to do a poster	9 10
Three	The scientific content of the poster (CIRCLE YOUR SCORE):	
A	Zero – the scientific content of this poster is totally unconvincing. Most information is wrong	1 2
B	Below average –too little information, faulty reasoning, statistics and/or results are flawed	3 4
C	Average – the information in this poster is what I would expect from this congress	5 6
D	Above average – the information here is interesting, exciting, and made me think	7 8
E	Fantastic – very interesting, publishable results	9 10
Four	The overall value to the congress of this POSTER was (CIRCLE YOUR SCORE):	
A	Non-existent (no relevance to this type of congress)	1 2
B	Low (the poster did not contribute significantly to the session)	3 4
C	Acceptable (this is the type of poster I was expecting to see)	5 6
D	High (this contributed more than most other posters)	7 8
E	Exceptional (this was a highlight of the session, and one of the top contributions to the congress; this poster presenter should be encouraged to present platform presentations around this topic in the future)	9 10
Five	The subject of this poster is (TICK ONE):	
A	Relatively foreign to me – many of the issues that are being discussed fall outside my experience and interests	
B	Relatively familiar to me – while I do not consider myself an expert in this field, I have an interest in the subject	
C	My area of direct interest – I am highly familiar with the subject, and I have direct experience in this field	
GENERAL COMMENTS RELATING TO THIS POSTER PRESENTATION:		



The Peter Edwards Award

Farming is a backbone of African economies and sound land-use is a backbone of conservation of natural resources. The **Peter Edwards Award** award is made each year to a land-user in the area of the annual Congress in recognition of the sound application and practice of the principles of range and forage science and conservation.

Objective: The aim of the award is to recognise top farmers in different areas of southern Africa, and thereby encourage the wise use of natural resources.

Criteria: Potential recipients are identified by the Congress Organising Committee each year. The recipients are short-listed and farms or land-units visited by an adjudication panel comprising members of the Organising Committee and local advisory personnel. The recipient need not be a member of the GSSA but should be encouraged to join. Considerations when identifying potential candidates might include the following:

- The recipient should be utilising veld (range and/or pasture for domestic livestock production and/or game farming).
- Farming practices should include, as far as possible, sound cultural and management practices which are recommended to ensure the optimum economic utilisation, conservation and reclamation of natural resources.
- Contribution to his/her community by way of participation and leadership in, for example, study groups, soil conservation committees, conservancies or organised agriculture.
- Where a group is identified to receive the award, for example, a study group, soil conservation committee, conservancy, tribal authority or a community making use of communal land, the leader in such a group would receive the award on behalf of such a group.

Grassland Society of Southern Africa Prestige Award

This award is made to the scientist whose work has made a significant impact on range and forage science and/or practice.

Objective: The primary aim of this award is to encourage the scientific advancement of the discipline of range and forage science in Africa. It is aimed at all research fields that have an influence on the development of science, and applies to research work that breaks new ground in the discipline.

Criteria:

- This award should only recognise outstanding contributions to the science of the discipline.
- The research programme or the interpretation should be innovative.
- The results and, in particular, the interpretation which is applied to them should have a substantial impact on the discipline.
- Signed nominations must be submitted in writing together with a motivation to the Honorary Secretary (as per Constitution).
- Decisions regarding this award are made by secret ballot/unanimous vote at a Council meeting.
- It is not mandatory for this award to be made at each Congress.

Grassland Society of Southern Africa Meritorious Award

This award is made to a member of the GSSA in recognition of exceptional service to the Society.

Objective: The primary aim of this award is to encourage active and meaningful participation in the running of the GSSA. It is not made in recognition of research but rather for contributions to the development of the Society.



Criteria:

- The recipient must have contributed significantly to the development of the Society over extended period of time.
- The GSSA must have benefited from such contribution in some manner, (i.e. an inactive Council member serving on the Council for more than five years does not qualify).
- Signed nominations must be submitted in writing together with a motivation to the Honorary Secretary (as per Constitution).
- Decisions regarding this award are made by secret ballot at a Council meeting and require a two thirds majority.
- It is not mandatory for this award to be made at each Congress.

Young Grassland Scientist Award

Objective: This award is made to encourage new researchers in the discipline.

Criteria:

- The award is available only to members of the Society who have been involved in scientific research in the discipline for less than five years by 31 January of the year in which the Congress is held.
- The award is made to an individual only once.
- The award should be made on the all-round performance of new scientists. Factors which should be taken into consideration include the quality of the research and its presentation (in the form of both Congress presentations as well as publications), as well as the potential impact the research has on the discipline of range and forage science.
- At least one peer-reviewed scientific publication and one formal conference presentation (no posters, and not necessarily at the GSSA Congress) must be made by every nominee. The amount of supervision associated with such presentations of research must be taken into account.
- Signed nominations must be submitted in writing together with a motivation to the Honorary Secretary (as per Constitution).
- Decisions regarding this award are made by secret ballot at a Council meeting.
- It is not mandatory for this award to be made at each Congress, and the award may be made to more than one person in any particular year.

Grassland Society of Southern Africa Honorary Membership

This award is made to a person whom the Society wishes to honour by reason of meritorious services rendered for the realisation of the objects of the Society or by reason of his/her eminence in science.

Best Paper Published in the African Journal of Range and Forage Science

This award is made to the author/s of the best paper published in the African Journal of Range and Forage Science in the preceding year.

- The award will be made annually at each Congress.
- The paper should be innovative and make a significant contribution to Grassland Science.
- The paper should preferably be central to the discipline although this is not a prerequisite provided it makes a significant contribution to Grassland Science.
- The scientific procedures used in the paper must be of a high standard, given the constraints of the study in question. In this regard, potential winning papers must be “passed” by the editorial committee (to eliminate the necessity of extensive review by the adjudication committee).
- Within these broad guidelines, the adjudicators are given reasonably wide leeway to choose, in their opinion, the “best scientific paper”.



The Faux Pas Award

“Every village has its own idiot . . .
Every circus has its own clown . . .
But this trophy is dedicated
to our very own star . . .”

Johannes Evert Kappeyne van de Coppello was the first recipient of this coveted award at the 30th Annual Congress held in Kroonstad in January 1995. Each year, Congress delegates have kept their eyes and their ears open to find the most deserving Village Idiot amongst the group and so far it has always found a home to keep it safe and in prominent view for the year.

So make a note of all the hilarious moments, the embarrassing moments, the “oops” moments, and cast your vote for the winner of the Faux Pas award of the 50th Annual Congress of the Grassland Society of Southern Africa. Nominations should be received by Thursday 23rd July at 3pm. Hand them in at the registration desk.





Congress 50 scientific programme

Monday 20 July 2015

Time	Title	Presenter	
18:00	Meet and Greet and welcome	Kevin Kirkman	
18:10	The role of scientific societies	Scott Collins	34
18:30	Presidential address	Tony Palmer	

Tuesday 21 July 2015 (A)

Time	Title	Name	Page
Plenary			
09:00	Opening Address	Albert Modi	
09:15	Trends in grassland science: does the past predict the future?	Scott Collins	35
09:45	What are we doing to our climate? And what is the climate likely to do to us in South Africa?	Roland Schulze	36
10:30	Tea		
Session 1: Veld productivity and quality			
11:00	Progress made on using earth-observation-based estimation of grass nutrients and biomass as indicators of rangeland (forage) quality and quantity in the savanna environments	Abel Ramoelo	37
11:20	Herbaceous plant species richness: How does it relate to grazing veld condition?	Petros Ngwenya	38
11:40	Effects of tannins on body weight, faecal nitrogen and nutritionally related blood metabolites of free-ranging goats in African savannas	Ntuthuko Mkhize	39
12:00	Influence of tannin-rich Acacia karroo on blood profile of indigenous Pedi goats	David Brown	40
12:20	Effects of post burn re-growth and protein supplements on foraging behaviour and diet selection of goats	Michael Mkwala	42
12:40	Long term effect of fire season on photosynthetically active radiation, leaf area index, biomass production and soil chemical properties in the Döhne Sourveld of Eastern Cape, South Africa	Zama Ndovela	43
13:00	Lunch		
Session 2: Vegetation change			
14:00	Systematic land-cover change in KwaZulu-Natal, South Africa	Debbie Jewitt	44
14:20	Using Acacia tortilis demography to predict vegetation shift in the gravel plains of Sharjah, United Arab Emirates	Lisa Hebbelmann	46
14:40	The effects of gut passage and dung fertilization on seedling establishment of Dichrostachys cinerea and Acacia nilotica	Julius Tjelele	47
15:00	Regular fire maintains stable grasslands in the KwaZulu-Natal Drakensberg: Evidence from a long-term burning trial	Colin S Everson	48
15:20	Fire in the Nama-Karoo – a shift from dwarf-shrubland to sparse grassland	Justin du Toit	49
15:40	The effects of fire on species and growth form diversity in Namaqualand Granite Renosterveld	Megan Simons	49
16:00	Tea		



Time	Title	Name	Page
16:30	Session 3: Research proposal posters		
	Communal rangelands		
	Assessing the quality of available forage, and its effects on livestock productivity in the semi-arid communal rangelands in South Africa	Sharna Sparks	50
	Assessing the concept: Livestock water productivity in the rehabilitation and management of rangelands after the clearing of invasive alien plants	Bukho Gusha	51
	Unpacking the role of urban-rural linkages associated with livestock production on livelihoods, rangeland management and water supply in the rural areas of the Eastern Cape	Andiswa Finca	52
	Investigating intergenerational dynamics and agrarian institutions in South Africa's semi-arid rangeland commons	Melvin Swarts	53
	Medicinal uses of cactus pear by livestock farmers in Makhuduthamaga local municipality in the Limpopo province	Dimakatso Phaahla	54
	The effect of fire history on root carbohydrate concentrations of encroaching Terminalia sericea at the Waterberg Plateau Park, central Namibia	Siphiwe P Lutibezi	54
	General		
	The effect of environmental factors and rangeland condition on Seriphium plumosum L. invasion susceptibility	Gilbert Pule	55
	Improving soil surface conditions by using brush-packing to facilitate germination establishment on overgrazed rangelands	Reletile T Modungwa	56
	Ecosystems, carbon and nitrogen responses to bush encroachment in the semi-arid areas of the Eastern Cape	Tanki Thubela	57
	The effect of fire and grazing on soil microbial and plant diversity in fynbos and renosterveld vegetation types in Nieuwoudtville	Lyle M Lucas	58
	How does burning, mowing and high-intensity grazing affect tuft and seedling dynamics of key species in the tall dry grassveld in KwaZulu-Natal, South Africa?	Stephanie M Lyle	59
	Pastures		
	Effects of cultivar selection, planting date and cutting frequency on dry matter yield of Raphanus sativus, in the North West Province, South Africa	Matsobane A Ngoasheng	60
	Assessing the potential of tagasaste for forage improvement in Eastern Cape Thornveld	Craig Trethewey	61
	Legumes from the Northern Cape Province of South Africa and their potential use as forage crops	Francuois Muller	62
	The reinforcement of aged Digitaria eriantha cultivations	Yvette Brits	63
	Nutritional impact of supplementing tree lucerne (Chamaecytisus palmensis) on dry season productivity of growing goats	Ntuwiseni E Mmbi	64
	Introduction of tree lucerne (Chamaecytisus palmensis) on an existing Eragrostis curvula pasture stand.	M Norman Magoro	65
	Seasonal effects on pasture establishment of three grass-legume seed mixtures used for coal mine rehabilitation	Nico J le Roux	66
17:00	Annual General Meeting		33
19:00	Dinner		



Tuesday 21 July 2015 (B)

Time	Title	Presenter	Page
Session 4: Communal range I			
11:00	The impact of green innovations on sustainable livestock systems in communal rangelands	Terry Everson	67
11:20	Assessing livestock farmers' understanding and adaptations to climate change in arid regions of South Africa	Khululiwe Ntombela	68
11:40	Evaluating holistic management in Hwange Communal Lands, Zimbabwe: An actor-oriented livelihoods approach, incorporating everyday politics and resistance	Tapiwa Chatikobo	69
12:00	Promoting the use home-mixed supplements as alternatives to commercial supplements in smallholder beef production systems of the sub-humid region of Zimbabwe	Irenie Chakoma	70
12:20	The potential of replacing conventional dairy supplements with forage legume-based diets in Zimbabwe's smallholder dairy sector	Lovemore Gwiriri	71
12:40	Improving market participation and competitiveness of communal area beef farmers in Zimbabwe's Mashonaland East Province through better feeding and value chain initiatives.	Godfrey Manyawu	72
13:00	Lunch		
Session 5: Communal range II			
14:00	Forage seed production and trade as a pathway out of poverty in the smallholder sector: Lessons from the Zimbabwe Crop Livestock Integration for Food Security (ZimCLIFS) Project	Irenie Chakoma	74
14:20	Rehabilitation of degraded grassland systems through reseeding improved forage legumes using ecologically-sound techniques for enhancing productivity	Elly Sabiiti	75
14:40	Voluntary intake and palatability indices of Pedi goats fed different levels of Acacia karroo leaf meal by the cafeteria method	David Brown	76
15:00	Apparent digestibility, microbial protein supply and nutrient supply kinetics of selected forage legumes in goats	Simbarashe Katsande	77
15:20	The effect of herbage conditioning and natural aeration methods on rate of moisture loss and crude protein content of Lablab purpureus herbage during hay-making	Godfrey Manyawu	78
15:40	Fine-scale modelling and mapping of soil functional characteristics and vegetation across landscapes: A case study from communal lands of Bushbuckridge	Wayne Twine	78
16:00	Tea		
16:30	Session 6: Communal range poster viewing		
	Early growth performance of dolichos (<i>Lablab purpureus</i>) fodder banks for communal dairy cattle in the Eastern Cape Province	Hennie J van Rooyen	79
	Early growth performance of spineless cactus pear (<i>Opuntia</i> spp.) fodder banks for communal dairy cattle in the Limpopo Province	Flip Breytenbach	80
	Do nutrients alleviate the negative effect of defoliation on decreaser and increaser grasses?	Craig D Morris	81
	Practical implications of introducing a rotational rest-based grazing system into a communal area near Matatiele, Eastern Cape	Brigid Letty	82



Time	Title	Presenter	Page
	The herbaceous yield and soil nutrient content contribution of various leguminous pastures planted in two communal areas of the Eastern Cape Province	Unathi Gulwa	83
	Community leadership enhances rural development	Nobuntu P Mapeyi	84
	Veld condition assessment of the grazing areas used by emerging farmers in the Gauteng province, South Africa	Lucas Letsoalo	85

Wednesday 22 July 2015 (A)

Time	Title	Presenter	Page
Plenary			
09:00	SAEON Cathedral Peak global change monitoring platform: Update on activities	Sue J. van Rensburg	86
09:20	International Livestock Research Institute (ILRI) in Southern Africa	Sikhalazo Dube	87
09:40	IPBES: Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services	Luthando Dziba	88
Session 7: Bush encroachment I			
09:50	Effects and use of multiple ignitions for controlling encroaching shrub species in north-eastern KwaZulu Natal	Winston Trollope	90
10:10	Local vs. landscape effects of bush encroachment on abiotic conditions and herbaceous composition and productivity	Susi Vetter	91
10:30	Is there an ecological and cost-effective answer to controlling bush encroachment?	Ross Goode	92
10:50	Tea		
Session 8: Bush encroachment II			
11:20	Does it pay to reduce Acacia karroo? A cost-benefit standoff.	Neels de Ridder	93
11:40	Nutrient supplementation enhances shrub use by free-ranging goats: Implications for bush control in semi-arid savannas	Ntuthuko Mkhize	94
12:00	Tours		
18:00	GSSA history		
18:30	Journal special issue launch		
19:00	Dinner		



Wednesday 22 July 2015 (B)

Time	Title	Presenter	Page
Session 9: Wildlife			
09:50	Tree trends in protected areas adjacent to the Kruger National Park	Mike J S Peel	96
10:10	The diet and ecology of introduced giraffe in Subtropical Thicket vegetation within the Little Karoo region of South Africa	Jamie Paulse	97
10:30	Variation between seasons and height strata in availability of browse to browsing game species	Beanélri Janecke	98
10:50	Tea		
11:20	Session 10: General poster viewing		
	The effect of high density livestock grazing on a mesic grassland in South Africa	Sindiso C Chamane	99
	Vegetation cover is critical for faunal diversity in moist highland grasslands	Ian Litte	100
	Degraded communal rangelands compromised by alien infestation: Is restoration possible?	Lumko Mboyi	101
	Big trees and elephant in protected areas adjacent to the Kruger National Park	Mike J S Peel	102
	Economic analysis of chemical bush control in Miombo woodlands	Mthunzi Mndela	102
	Fire history and frost in an arid savanna woodland: Understanding its impacts on vegetation structure and diversity at the Waterberg Plateau Park, Central Namibia	Vistorina Amputu	103
	Comparison of herbaceous plant species composition, diversity and rangeland condition between camps utilised by large and small stock at Neudamm Farm, central Namibia	Vistorina Amputu	104
	Influence of <i>Acacia mearnsii</i> (black wattle) on rangeland production in semi-arid South African grasslands: implications for rangeland rehabilitation	Onalenna Gwate	105
	Vegetation composition of <i>Opuntia humifusa</i> invaded cattle and sheep grazing areas of western South Africa	Lukas Chipfupa	106
	Morphology of the encroacher shrub <i>Seriphium plumosum</i> in Bankenveld grassland	Sellina E Nkosi	107
	Variation in grass morphological traits and their relation to fire in KwaZulu-Natal	Naledi Z Zama	107
	The effect of fire histories on soil nutrients, soil carbon and soil respiration on the Waterberg Plateau Park, central Namibia	Elise N Nghalipo	108
	Large-scale foraging behaviour of free-ranging goats: influence of herd size, season and landscape quality	Manqhai Kraai	109
	Seasonal regulation of condensed tannin consumption by intermediate feeders in a semi-arid savanna	Ntuthuko R Mkhize	110
	Condensed tannins increase the amount of time animals spend grazing	Ntuthuko R Mkhize	111
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09:40	A conceptual basis for rangeland management	Richard Fynn	120
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Session 11: HRM Special Session I			
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10:35	Conserving Afromontane grasslands through fire and grazing in remnant ecological networks in a timber production mosaic	Lize J. van der Merwe	123
10:55	Response of vegetation, soil, animals and water cycle to different management regimes: Victoria Falls area, Zimbabwe	Mike J S Peel	124
11:15	(In)compatibility of scientific and holistic resource management	K P Kirkman	124
11:35	Grass, animals and people: A global dilemma	Peter Ardington	125
11:55	Managing the ecological role of fire in mesic grasslands	Dr Richard Lechmere-Oertel	125
12:15	Holistic management	Wayne Knight	126
12:35	Savory or Unsavory: The Application of Holistic Resource Management in Mesic Grasslands of KwaZulu-Natal	Cobus (J) O Botha	127
12:55	A meta-analysis: Does short duration grazing work in the grasslands?	Heidi-Jayne Hawkins	128
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Session 12: HRM Special Session II			
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Session 13: WWF workshop I			
15:00	Conservation Fundraising Workshop	Augustine Morkel	130
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18:30	Gala Dinner		



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	The production of different lucerne cultivars in the Fish River Valley of the Eastern Cape, South Africa	Gideon Jordaan	136
	Quantitative characterization and fodder value of structural polysaccharides in maturing hybrid maize	Florence V Nherera-Chokuda	137
	Growth characteristics and fodder production potential of <i>Sorghum bicolor</i>	Eric C Timpong-Jones	138
	Relating canopy cover to water use of kikuyu pasture over-sown with temperate grasses or legume	Malissa Murphy	138
	Water use of mixed grass (kikuyu, ryegrass, cocksfoot and tall fescue species) and legume (clover and lucerne) pastures	Omphile Schoole	139
	The water use efficiency of irrigated SA Standard and Super Cuf lucerne varieties, in relation to dry matter yield and leaf to stem ratio.	Alice Gwelo	140
	Water use and bioenergy potential of subtropical Poaceae species as second generation field crops	Heinrich Cloete	141
	Germination response of coated <i>Digitaria eriantha</i> seed in soils/substrates with different pH and salinity levels	P Juan Pretorius	142
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11:00	Pasture plant breeding in South Africa: lessons from the past and future needs	Sigrun Ammann	143
11:20	Could 'mosaic' irrigation and strategic feeding be a better economic option than broad-scale pasture or infrastructure development for livestock production in semi-arid environments? A case study from northern Australia	Neil MacLeod	145
11:40	The seasonal and annual dry matter production of <i>Festulolium</i> hybrids compared to <i>Festuca</i> spp. and <i>Lolium</i> spp. in the southern Cape	Janke van der Colf	146
12:00	Methane yield from pregnant heifers grazing natural veld and forage sorghum as measured with a Laser Methane Detector	Marsia Grobler	148
12:20	Direct anthelmintic effects of feeding <i>Lespedeza cuneata</i> hay (leaf material) on gastrointestinal parasites in sheep: In vivo studies	Erika van Zyl	148
12:40	Impact of fertilisation on the chemical quality of cultivated pasture soil	Pieter Swanepoel	149
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Time	Title	Presenter	Page
14:00	Session 17: Pastures II		
14:00	Effects of nitrogen fertilization and cutting interval on biomass yield and quality of banagrass (Hybrid Pennisetum) and guinea grass (<i>Panicum maximum</i>) grown as biomass crops	Sabelo Ndlazi	150
14:20	The effect of bio-digester slurry on the mineral and chemical composition of napier fodder at different growth stages	Joseph Baloyi	152
14:40	Optical chlorophyll methods as tools for rapid and accurate nutritional assessment of pasture herbage: A review	Martin Hughes	152
15:00	Yield, nutritional value and condensed tannin level changes in <i>Lespedeza cuneata</i> under different defoliation frequencies and intensities	Erika van Zyl	153
15:20	Effect of types of legume intercrop on the mineral content of native <i>Panicum maximum</i> (Green Panic)	Olusola Aderinola	153
15:40	Evaluation of grazing Jersey and Angus/Jersey nurse cows in a multiple suckling calf rearing system	Josef van Wyngaard	154
16:00	Tea		
	Session 18: Pastures III		
16:30	Salinity effects on germination potential of selected pasture grass species used for mine rehabilitation	Mziwanda Mangwane	155
16:50	The value of coated Rhodes grass seed in rehabilitation	Leana Nel	156
17:10	Inter- and intra-species competition as influenced by variable seeding rates and nurse crop association	Dirk Coetzee	157



Agenda: Annual General Meeting

Grassland Society of Southern Africa

21 July 2015, 15:00 – 17:00

Royal Show Grounds, Pietermaritzburg

No	Agenda Item	Responsible
1.	Welcome	TP
2.	Present and apologies	TP
3.	Additions to and acceptance of the agenda	TP
4.	Approval of the minutes for 22 July 2014	TP
5.	Matters arising	
5.1.	Congress 51 (2016)	PS
5.2.	IGC/IRC bids	FdT, TP
5.3.	IRC 2016 Congress	TP
5.4.	Conservation award	JdT
5.5.	Global Rangelands website update	
6.	Scientific Editor's report	JB
7.	Publication Editor's report: Grassroots	PS
8.	Website Editor's report	PG
9.	Public Relations Officer's report	MS
10.	Professional Affairs Committee report	LB
11.	Trust report	RG
11.1.	Proposed amendments to the GSSA Trust relating to the new legal requirements for the change of Trustees	TP
12.	Honorary Treasurer's report	JdT
13.	Election of new Office Bearers	
13.1.	Vice President	
13.2.	Additional Member (Assistant Publications editor)	
13.3.	Additional Member (Assistant Publications editor)	
13.4.	Additional Member (Assistant website editor)	
13.5.	Additional Member (Assistant public relations officer)	
14.	General	
14.1.	Call for formal bid for Congress 52 (2017)	
15.	Date of next meeting	
16.	Closure	



Meet and Greet

The changing and uncertain role of scientific societies

Scott L Collins

Department of Biology, University of New Mexico, United States of America. Email: scollins@sevilleta.unm.edu

The Royal Society was founded in 1660 as a mechanism to promote communication and exchange knowledge among scientists. Since that time thousands of scientific societies have formed, all of which have the same fundamental goal, to promote communication and share knowledge, primarily by hosting scientific meetings and publishing journals. Over time, larger scientific societies have become an end unto themselves by developing headquarters in national capitals, like Washington DC, with the goal of communicating science to a broader audience of educators, decision-makers and the public. Such infrastructure requires financial resources. In the past, the main sources of income for societies have been membership dues, journal subscriptions, particularly library subscriptions, and profits from annual meetings. At first many societies profited by self-publishing their journals, but now commercial publishers are gobbling up each other and they dominate the scientific publishing market. The change from print to online only publishing can lead to a decline in the “branding” of articles and society journals. Declining revenues from individual memberships and subscriptions hurt the bottom line, but the biggest pressures on scientific societies comes from the Open Access movement. Open Access (OA) benefits authors and readers by making products of scientific research freely available to anyone. But OA shifts the cost burden and economic model from institutional subscribers to authors, and threatens the viability of commercial publishers and the revenues these publishers pay to scientific societies. Despite numerous economic challenges scientific societies continue to serve the same essential goals that led to the establishment of the Royal Society 350 years ago, sharing and communicating knowledge.