

08:00 - 09:00

09:00 - 16:00

Registration for Policy & Practice Workshop

GRASSLAND SOCIETY OF SOUTHERN AFRICA 52nd Annual Congress

Advancing Rangeland Ecology and Pasture Management

23 to 28 July 2017, Wits Rural Facility, near Hoedspruit, Mpumalanga-Limpopo Border, South Africa

DRAFT PROGRAMME OF EVENTS as at 4 July 2017							
Sunday, 23 July 2017							
09:00 - 10:30	Registration for Research Skills Workshop						
10:30 - 17:00	Research Skills Workshop						
18:30	DINNER						
	Monday, 24 July 2017						
09:00 - 12:00		A Council Mee					
12:00 - 13:00	LUNCH	, t Courion Moo	9	Registration open			
13:00 - 16:00	Research Skills Workshop			throughout day until 17:00			
	Opening of the 52nd Annual Congress of the Grassland	d Society of So	outhern Africa				
18:00 - 19:15	Welcome: Dr Mike Peel, Agricultural Research Council - Animal Production Institute Presidential Address: Dr Julius Tjelele, Agricultural Research Council - Animal Production Institute Opening Address: Dr John Job, Kruger-to-Canyons Biosphere - Grasslands, Bushes and a Biosphere						
19:15	MEET & GREET						
	Tuesd	lay, 25 July 2	2017				
07:30 - 08:30	Registration (continues)						
	Opening Plenary Session						
08:30 - 10:30	Keynote address: Heterogeneity as the basis for rangelar	nd	Sam Fuhlendorf, Oklahoma State Univer	rsity			
	Keynote address: Biodiversity for society – a reflection on	the diversity	Louise Swemmer, SANParks - Kruger National Park				
10:30 - 11:30	TEA AND STANDARD POSTER VIEWING						
11:30 - 13:30	Rangeland Ecology		Planted Pastures: Cultivar Adaptation	s and Management			
13:30 - 14:30	LUNCH						
14:30 - 16:50	Rangeland Management Keynote address: Social and legal barriers and opportunities for using prescribed fire on private land in the Southern Great Plains, USA	Urs Kreuter, Texas A&M University	Planted Pastures: Fertilizer Application	ons for Maximum Production			
	Keynote address: Managing African rangelands using heterogeneity characteristics	Rina Grant, NMMU	Planted Pastures: Production Systems and Management				
17:00	ANNUAL GENERAL MEETING OF THE GRASSLAND SO	OCIETY OF SO	OUTHERN AFRICA WITH REFRESHMEN	NTS			
19:00	DINNER						
	Wednes	day, 26 Jul	y 2017				
07:00-08:00	Registration (continues)						
08:00-10:00	Tree-Grass Interactions		Workshop: Social and legal barriers and opportunities for using prescribed fire on private land in the Southern Great Plains, USA				
10:00-11:00	TEA AND STANDARD POSTER VIEWING						
11:00-13:00	Rangeland Assessment and Monitoring		Livestock Diet and Nutrition				
13:00-14:00	LUNCH						
14:00-15:40	Rangeland Fire Ecology		Land Transformation and Restoration	1			
15:40-17:00	TEA AND RESEARCH PROPOSAL POSTER VIEWING A	AND EVALUAT	ION				
18:00	QUIZ EVENING AND DINNER						
	Thursday, 27 July 2017						
07:00-08:00	Registration (continues)						
08:00-09:30	Biodiversity Initiatives and Conservation Planning		Communal Livestock Farming System	ns			
09:30-10:00	TEA AND STANDARD POSTER VIEWING		de la companya de la				
10:00-12:30 Workshop: Grasses as Invasive Aliens (with further discussion session after lunch) Mid-Congress Tours with PACKED LUNCH: The challenges of managing protected areas in the Lowveld Savannas: perspectives from national parks, provincial parks and private reserves Herding 4 Health: rangeland management in an FMD area Invasive alien plant control and biomonitoring: ecosystem restoration from grasslands to rivers WITS Rural Facility: Savanna ecology field experiments Wildlife breeding							
19:00	GALA DINNER						

To register, please email Erica Joubert on info@grassland.org.za

Friday, 28 July 2017

Workshop: Policy & Practice - The influence of legislation, policy and strategies on effective resource management and planning



08:30-10:30 08:30

08:40

GRASSLAND SOCIETY OF SOUTHERN AFRICA 52nd Annual Congress

DETAILED DRAFT PROGRAMME AS AT 4 JULY 2017

TOESDAT, 29 JULY 2017				
Opening Plenary Session				
Welcome and introductions	Mike Peel			
Kaynata addrage: Heterogeneity as the basis for rangeland management	Sam Fuhlendorf			

IECDAY OF HILV 2017

Keynote address: Biodiversity for society – a reflection on the diversity of direct local impacts of the Kruger National

09:20 10:00 Discussion led by session chair

10:30-11:30 TEA and STANDARD POSTER VIEWING SESSION

E V	Rangeland Ecology		Planted Pastures: Cultivar Adaptations and Management		
	Effect of rest and distance from water on the vegetation in the Gamka Karoo, South Africa	Nelmarie Saayman	Evaluation of forage yield of pigeon pea (<i>Cajanus cajan</i> (L.) Millspaugh) varieties in Eastern Cape, South Africa	Asiphe Mhlelembana	
	Big trees and elephant in the Associated Private Nature Reserves	Mike Peel	The characterisation of an <i>Opuntia ficus-indica</i> (cactus pear) collection conserved by the ARC-National Forage Genebank	Letty Masemola	
	Do grazing response groups explain the relative defoliation tolerance of mesic grassland species?	Naledi Zama	Planted Pastures: Production Systems and	Management	
	The effect of land-use on herbaceous production and grazing capacity in the Molopo district of the North West Province	Franci Jordaan	Seasonal effect on quality, yield and botanical composition of cultivated beef pasture	Josef van Wyngaard	
	The influence of rainfall zone, catenal position, and distance from village on composition and structure of herbaceous vegetation in a communal rangeland	Wayne Twine	Intake of grass hay by Jersey cows as affected by supplementation with essential oils and its effect on milk yield and composition	Portia Moshidi	
	Rangeland Management		Planted Pastures: Fertilizer Applications for	Maximum	

Current range condition in relation to land ownership types in Gauteng province, South

The effects of holistic planned grazing, continuous grazing and 4-camp rotational grazing systems on tick loads and worm counts Monde Rapiya

Production Lucas Letsoalo The effect of phosphorus application and Rhizobium

inoculation on growth performance and biomass production of Lablab purpureus in Alice, South Africa

Sanele Mpongwana

Louise

Swemmer Mike Peel

Parallel Sessions

Range	land	Eco	log

on grazing animals

11:30-

13:30

11:30

11:50

12:10

12:30

12:50

Patterns of grass productivity in communal rangelands and protected areas in semi-arid Mopaneveld, and implications for rehabilitation

Swemmer

Tony

The production potential and botanical composition of kikuyu over-sown with temperate

Planted Pastures: Cultivar Adaptations and Management

Janke van der Colf

The impact of livestock grazing on inselberg vegetation along a grazing gradient in three biomes in South Africa

Laetitia Piers

Effect of cutting on dry matter and total non-structural carbohydrate percentages of ten selected Italian ryegrass cultivars

grass-legume mixtures using different

establishment methods

Khutso Mohubedu

What are the long-term effects of high density, short duration stocking on the soils and vegetation of mesic grassland in South Africa?

Kevin Kirkman

Morphological differences between chicory varieties and the potential of using plant height as a measure of dry matter yield

Sigrun Ammann

Mziwanda

Mangwane

Effect of bush control on species composition, tiller and leaf production of grasses The importance of ecosystem state factors to the hydrologic responses of woodlands to land

Mthunzi Mndela

Jason West

selected Lolium and Eragrostis grass species Effect of cutting stages on re-growth dry matter production and nutritional value of the five winter cereal cultivars in Moloto district Gauteng and Nooigedacht, Mpumalanga province

Effects of salinity on germination performance of

Patrick Rakau

management activities Browsing effects on species composition, structural diversity and biomass production 13:10 under pastoral and commercial ranching in semi-

arid savanna, northern Kenya

Staline Kibet

perenne (L)), cocksfoot (Dactylis glomerata (L)) and tall fescue (Festuca arundinacea (Schreb)) varieties grown under irrigation at Alice, South Africa

Biomass production of perennial ryegrass (Lolium

Sizwe Tikwayo

13:30 -14:30 LUNCH

14:30- 15:10	Parallel Sessions					
	Rangeland Management	14:30 - 16:50	Planted Pastures: Fertilizer Applications for Maximum Production	14:30 - 15:10		
14:30	Keynote address: Social and legal barriers and opportunities for using prescribed fire on private	Urs Kreuter	The effect of nitrogen fertilisation on dry matter production and botanical composition of grasslegume pastures in the southern Cape	Bernhard Jordaan		
14:50	land in the Southern Great Plains, USA		The effect of nitrogen fertilisation on the yield and botanical composition of kikuyu-based pastures	Charne Viljoen		
15:10	Keynote address: Managing African rangelands	Rina Grant	Planted Pastures: Production Systems and Management	15:10 - 16:50		
15:30	using heterogeneity characteristics	Tuna Gran	Designing diverse forage crop mixes for weed suppression	Chloe MacLaren		
15:50	Consolidation of the wildlife estate: management challenges at differing spatial scales with special reference to drought	Mike Peel	Influence of social dynamics on intensification of fodders innovations in communal areas of Limpopo province	Florence Nherera- Chokuda		
16:10	Comparison of holistic, conventional rotational and communal grazing management practices in the Eastern Cape grassland biome of South Africa: impacts on grass and soil properties	Solomon Tefera	Yield and chemical composition of native pastures in six semi-arid communal grazing lands located in three soil types: effect of disturbance and season	Ayanda Kwaza		
16:30	Holistic Planned Grazing™ fails to beef up farm production: an ox's-eye view	Zander Venter	Discussion led by session chair	TBC		
17:00	ANNUAL GENERAL MEETING OF THE	GRASSLAND S	SOCIETY OF SOUTHERN AFRICA WITH REFF	RESHMENTS		
19:00		DI	NNER			
	WED	NESDAY, 2	26 JULY 2017			
08:00- 10:00		Paralle	l Sessions			
	Tree-Grass Interactions					
08:00	Coppice dynamics of two common savannas trees species under different post-harvest treatments	Wayne Twine				
08:20	Comparing the effects of canopy cover increase on grass biomass between <i>Dichrostachys cinerea</i> and <i>Terminalia sericea</i>	Tilly Randle				
08:40	The effects of environmental factors on <i>Seriphium</i> plumosum L. encroachment susceptibility	Gilbert Pule	Workshop: Social and legal barriers and opportunities for using prescribed fire on private land in the Southern Great Plains, USA			
09:00	Woody plant densities, cover, height class distribution and their uses in six semi-arid communal grazing lands located in three soil types	Ayanda Kwaza				
09:20	Effects of <i>Pteronia incana</i> (blue bush) invasion on grass biomass production, species distribution and soil chemical characteristics under systematic control methods	Thando Ntutha				
09:40	The effect of fire, frost and simulated grazing on the survival of <i>Vachellia sieberiana</i> (formerly <i>Acacia sieberiana</i>) seedlings along an altitudinal gradient	Jennifer Russell				
10:00- 11:00	TEA and S	TANDARD P	OSTER VIEWING SESSION			
	Tree-Grass Interactions		ivestock Diet and Nutrition			
	The effect of temperature and growth medium on germination potential of unpalatable <i>Seriphium plumosum</i> L. seeds in growth chamber	Khwezi Myeki	Assessing diet selection, preferences and grazing parameters of herded sheep in the Succulent Karoo biome in South Africa	Amy Schroeder		
	Efficacy of different control methods on <i>Seriphium plumosum</i> on degraded rangeland of Mpumalanga province	Thabile Mokgakane	Bioactive compounds and rumen potency of leaf extracts of selected Savanna Mixed Bushveld trees	Claude Muya		
	Invasion of <i>Prosopis</i> species along riparian areas of the Molopo River, North West province, South Africa	Simanga Nkosi	Seasonal variation in nutritive value of four indigenous browse species used for livestock supplementation in the Eastern Cape	Siza Mthi		
	Rangeland Assessment and Monitoring		The efficacy of acetone leaf extracts of <i>Chicorium inty-bus</i> L. and <i>Lespedeza cuneata</i> on egg hatching of <i>Heamonchus contortus: in vitro</i> studies	Peter Oosthuizen		
	Scientific grazing capacity norms for the North West province	Franci Jordaan	Land Transformation and Restoration			
	Ecological monitoring to inform management of semi-arid African savannas: an assessment of techniques across the wildlife-livestock interface and the evaluation of a long term data set	Graeme Wolfaard	An investigation into the control of the invasive Phymaspermum acerosum (Curry's Post weed) in the KwaZulu-Natal Midlands Mistbelt Grassland	Michelle Keith		
	A comparison of the belt transect and adapted point -centred quarter sampling approaches to assessing woody savanna vegetation	Cobus Botha	Influences of land-use types on soil organic carbon, total nitrogen and related soil properties in semi-arid area, Pretoria	Abubeker Hassen		
			Effects of bush clearing on soil respiration in north-central Namibia: Cheetah Conservation Fund (CCF) and Erichsfelde	Wilhelmina Nuule		
			The potential of reseeding Anthephora pubescens and Brachiaria nigropedata to re-establish them at the Waterberg Plateau Park, central Namibia	Jazzman Kandjai		
			Germination and seedling establishment of indigenous legume species: assessing the potential for rehabilitation of mine soils	Zanele Ndhlazi		

11:00- 13:00	Parallel Sessions				
			Livestock Diet and Nutrition		
11:00	Savanna Long-term Research Initiative in the Southern Great Plains	John Walker	Retrogression in rumen and body metabolism of starving cattle on communal area grazing lands: case study of smallholder dairy cattle in Vhembe district, South Africa	Florence Nherera- Chokuda	
11:20	An assessment of woody biomass as a sustainable energy source in a bush thickened area of northern Namibia	Nico Smit	Comparing production of Zulu and Merino sheep on veld and grazing maize at the Dundee Research Station	Peter Oosthuizen	
11:40	Assessment of grass species composition and nutritive value as influenced by soil characteristics in two different grazing areas under North West province, South Africa	Sesupho Manyedi	Anti-nutrients and <i>in vitro</i> digestibility of <i>Lablab</i> purpureus and <i>Vigna unguiculata</i> forage legumes	Soul Washaya	
12:00	Competition and defoliation tolerance of Themeda triandra and Eragrostis curvula	Naledi Zama	A systematic study of <i>Themeda triandra</i> Forssk.: anatomy, genetics and cytology	Sinethemba Ntshangase	
12:20	Development of a robust, easy-to-use biodiversity index for mesic grasslands	velopment of a robust, easy-to-use diversity index for mesic grasslands Lize van der Merwe Discussion led by session chair			
12:40	NutNet Drakensberg: global change monitoring in a high elevation rangeland	Clinton Carbutt	, and the second second		
13:00		L	JNCH		
14:00- 15:40		Paralle	I Sessions		
	Rangeland Fire Ecology		Land Transformation and Restoration		
14:00	Hercules and the Hydra revisited: combining traditional management efforts with fire to control resprouting woody plant encroachment and restore savanna ecosystems	Bill Rogers	Containing desertification in arid northern Kunene region, Namibia	Axel Rothauge	
14:20	Fire ecology and management of wildfires in Indonesian rain forests growing on peat beds and its potential relevance to ground fires in southern African wetlands	Trevor Wilson	Targeted livestock grazing to improve and restore rangelands	John Walker	
14:40	The native, C3 grass <i>Festuca costata</i> alters grassland fuels and fire spread in the Drakensberg	Devan McGranahan	Challenges to measuring carbon fluxes in the Albany Thicket	Tony Palmer	
15:00	Does fire facilitate biodiversity or forage productivity in renosterveld rangelands in the Kamiesberg Uplands?	Megan Simons	Soil nutrient content and forage quality on old lands in the Umzimvubu Catchment	Ntomboxolo Mamayo	
15:20	Application of fire in savanna conservation areas	Bruce Brockett	Discussion led by session chair		
15:40– 17:00	TEA and RESEARCH	PROPOSAL	POSTER VIEWING and EVALUATION		
The effect of a	arbuscular mycorrhizal fungi, <i>Rhizobium inoculum</i> ar nt of three herbaceous legumes in Alice, South Afric		tiliser on soil properties, biomass yield and	Sanele Mpongwana	
Effects of herb	Effects of herbicide and phosphorous fertilisation on forage production and soil nutrients of abandoned lands planted with pasture legumes Wandile Mashece				
The effect of a nurseries in the	applying different phosphorous fertiliser levels on fou ne Eastern Cape province, South Africa	r leguminous pas	tures planted at Dohne and Bathurst	Nobulungisa Mgujulwa	
Determining rarable lands of	ainwater use efficiency, dry matter production and so of Krwakrwa communal rangelands, Eastern Cape, S	oil nutrient repleni South Africa	shing potential of dryland pastures produced in the old	Unathi Gulwa	
Assessing rainwater use efficiency of different grass species, biomass production and basal cover in two veld types of Krwakrwa communal 7				Tanki Thubela	
Effects of long-term fire exclusion on grass species composition, tuft density and soil physical properties in the Dohne Sourveld				Nolonwabo Jokani	
Impact of drought and elevated CO ₂ level on species diversity, productivity and water use efficiency of key forage species in Semi-arid grassland in Gauteng province					
Transpiration rate of Senegalia mellifera in relation to diurnal pattern, seasonal pattern, rainfall, size of the tree, tree density and environmental factors in a semi-arid Namibian Thornbush Savanna Nelago liyambo					
Assessing parasitism of small ruminants in arid communal rangelands of South Africa Saloshni Govender					
Assessing the relationship between genetic diversity and diet selection in a semi-arid communal livestock farming system Amy Schroeder					
Assessing the relationship between landscape functionality and small mammal assemblages in the arid communal drylands of Steinkopf, Northern Cape Laetitia Piers					
Assessment of bush clearing on grass production, woody structure and plant diversity in a semi-arid savanna, central Namibia					
Investigating active veld restoration by means of alternative fertilisation practices in the North West province Yvette Brits Control of bush engrousebment on Lenhalagens corrifolia abruh and soil proporties ground mixed bushveld region of Thembisile.					
Control of bush encroachment on Lopholaena corrifolia shrub and soil properties around mixed bushveld region of Thembisile Oupa Keromecwe The impacts of clien infectations on yeld grazing consity. Avanda					
Minik				Mnikathi	
Analysing competition strategies for invasion success of Solanum mauritianum (bugweed) in Eastern Cape province, South Africa Thando Ntutha					
The role of biodiversity in providing ecosystem goods and services in agricultural landscapes Sizwe Tikwayo					
18:00 QUIZ EVENING AND DINNER					

THURSDAY, 27JULY 2017 08:00-**Parallel Sessions** 09:30 **Biodiversity Initiatives and Conservation Planning Communal Livestock Farming Systems** Igshaan Planning for the maintenance of floristic diversity Climate change adaptation strategies in the 08:00 Debbie Jewitt under global change communal areas of Namibia and South Africa Samuels The future of communal livestock farming in The Gauteng Biodiversity Stewardship Khululiwe 08:20 Emily Taylor Programme semi-arid Namaqualand Ntombela Using the socio-ecological system in Carbon tax and the need for carbon Josef van understanding the challenges in collective Andiswa 08:40 sequestration and offset Wyngaard management of communal rangelands in the rural Finca Eastern Cape Strengthening rangeland stewardship and Addressing constraints to increase livestock Nobuntu Dan'sile 09:00 restoration through Research, Development and production in Taleni and Shweni communities, Matyholo-Cindi Innovation (RDI) learning platforms Chris Hani District municipality. South Africa Mapevi 09:30-TEA and STANDARD POSTER VIEWING SESSION 10:00 **Biodiversity Initiatives and Conservation Planning Communal Livestock Farming Systems** Performance of livestock production in north Response of migratory Falco amurensis to common Norman Eastern Cape communal areas: a stochastic Bukho Gusha grassland roost sites after short-term drought Magoro frontier analysis Rangeland biodiversity research in sub-Saharan Devan Africa lacks attention to spatial, temporal scale of McGranahan disturbance Railway side mapping of alien plants distribution in Collen Mpumalanga, South Africa Rabothata 10:00 -**Special Session: Grasses as Invasive Aliens** 12:30 Vernon 10:00 Grasses as invasive plants in South Africa Visser Khensani 10:20 Global impact assessment of alien grasses occurring in South Africa Nkuna Are invasive grasses (Poaceae) suitable targets for biological control? A case study of two African 10:40 Guy Sutton Sporobolus spp. invading Australia Lindokuhle 11:00 Competitive ability of vetiver grass: Does vetiver allow germination and establishment of native grasses? Dlamini Susan 11:20 Developing management guidelines for the cultivation of alien bamboos in South Africa Canavan 11:40 Discussion led by session chair **TBC** 13:00-Mid-Congress Tours with PACKED LUNCH Special Session: Grasses as Invasive Aliens 18:00 Wildlife breeding Herding 4 Health: rangeland management in an FMD area 2. The challenges of managing protected areas in the Lowveld Savannas: perspectives from national parks, provincial parks 3. Discussion session continues and private reserves Invasive alien plant control and biomonitoring: ecosystem 4. restoration from grasslands to rivers

GALA DINNER

WITS Rural Facility: Savanna ecology field experiments

19:00



GRASSLAND SOCIETY OF SOUTHERN AFRICA

Policy & Practice Workshop

The influence of legislation, policy and strategies on effective resource management and planning

DETAILED DRAFT PROGRAMME AS AT 4 JULY 2017

08:00- 09:00	Registration for the Policy & Practice Workshop					
09:00- 10:30	An overview of NEMA, NEMPAA, NEMBA and other South African legislation as it may pertain to ecologists and grassland specialists. This will be followed by a discussion on how to monitor and react to regulations.	Andrew Rossaak, Emross Consulting				
10:30- 11:00	TEA					
11:00- 12:30	An overview of relevant national strategies and policies, including how they were compiled and how they assist ecologists and grassland specialists.	Izak Venter, Free State Department of Agriculture				
12:30- 13:30	LUNCH					
13:30- 14:30	A discussion on developing provincial strategies for grasslands and grazing, including how and why, usefulness, monitoring and sharing.	Andrew Rossaak, Emross Consulting				
14:30- 15:00	TEA					
15:00- 16:00	A discussion on how to fit policies, strategies and legislation into management plans—steps going forward for institutions and private landowners.	Izak Venter, Free State Department of Agriculture				