

2016 INTERNATIONAL RANGELAND CONGRESS

17-22 JULY, 2016 | TCU PLACE | SASKATOON, SK



IRC 2016 PROGRAM AT A GLANCE

Sunday, July 17 2016					
9:00-16:00	INRA Workshop - Multifunctionality of Pastoralism (Gallery A)				
8:30-16:30	USGS-BLM Workshop - Monitoring rangeland condition and forecasting the future: Sage-grouse and the sagebrush-steppe ecosystem of western North America (Gallery B)				
8:30-17:00	ACIAR Workshop - Sustainable Chinese Grasslands (Gallery C)				
8:00-12:00	USDA-NRCS Workshop - Applications and Limitations of Extracting From Current Rangeland Evaluations to Determine Rangeland Soil Health Estimate (Gallery D)				
8:30-12:00	USDA-ARS Workshop - Rangeland Hydrology and Erosion Model (RHEM) Web Tool Workshop (Gallery Suites)				
13:00-17:00	Species at Risk: A Global Workshop (Gallery D)				
13:00-20:00	Registration (Main Entrance)				
18:30-19:00	Opening Ceremonies (Salon C,D)				
19:00-21:00	Welcome Reception (Gallery A,B,C)				
Monday, July 18 2016					
7:00-8:30	Registration				
8:30-10:00	Plenary Session 1. State of Global & Canadian Rangeland and Pasture Resources				
Room	Salon C, D				
	A Brief Tour of Canada's Rangeland and Pasture Resources <i>Dr. Ed Bork, Rangeland Research Institute, University of Alberta, Canada</i>				
	Global Range Resources : A Perspective on Their Use <i>Dr. Yingjun Zhang, Professor & Chief Scientist, China Agricultural University, China</i>				
10:00-10:30	Networking Break				
10:30-12:00	Concurrent Oral Sessions				
Themes	1. Ecosite descriptions & ecoregion classification	2. Historical development of rangelands	3. Conservation of wildlife and natural areas	4. Grazing management practices (1)	5. Genetic resources and forage development
Room	Gallery Suites	Gallery A	Gallery B	Gallery C	Gallery D
Moderator	Robin Bloom	Bill Houston	Kerry Hecker	Kerry LaForge	Edmund Sottie

10:30-10:45	Developing Ecological Site Descriptions on Mongolian Rangelands to Enhance Monitoring Condition and Trend <i>Michael B. Hale, United States</i>	Can rangeland livestock systems compete in a global market? evidence from the past and present <i>Karl Behrendt, Australia</i>	The Environmental Impacts of Harvesting Caterpillar-Fungus on the Tibet-Qinghai Alpine Meadows <i>Zhaxi Gongbo, China</i>	Herbivore assemblages as a crucial factor in future grazing management on steppe grasslands <i>Deli Wang, China</i>	Analysis of morphological diversity of five native forage species, used in re-vegetation programs in Chihuahua, Mexico <i>Federico Villarreal-Guerrero, Mexico</i>
10:45-11:00	Testing the State and Transition Model for the <i>Stipa krylovii</i> – <i>Cleistogenes squarrosa</i> -forb community in steppe zone of Mongolia <i>Sumjidmaa Sainnemekh, Mongolia</i>	Canadian Rangeland Development <i>Peggy Strankman, Canada</i>	The Territory Conservation Agreements Program: Promoting Integrated Conservation Management in Australia's Northern Territory <i>Jon Hodgetts, Australia</i>	Efforts for sustainable pasture management in Central Asian high mountains: Implementation of the "law on pasture use" in Kyrgyzstan - a case study <i>Otto Kaufmann, Germany</i>	Status, potential and strategies for improving Asian grazing lands with special reference to India <i>Devendra Malaviya, India</i>
11:00-11:15	Soil types and vegetation on a grassland ecosystem in Uruguay <i>Valeria Cejas Pena, Uruguay</i>	Linking Seed Banks of Tame, Native and Invaded Parkland Pastures to Historical and Contemporary Management Practices <i>Lysandra Pyle, Canada</i>	Degradation of Natural Rangelands in Saudi Arabia <i>Nasser S. Al-Ghumaiz, Saudi Arabia</i>	Multi-decadal cow size changes and rangeland grazing: a cryptic trend altering plant-animal interaction ecology and impacts for grazing decisions <i>John Scasta, United States</i>	Canadian milkvetch: A range species of concern and curiosity <i>Nityananda Khanal, Canada</i>
11:15-11:30	Validating Riparian State-and-Transition Models <i>Miranda A. Meehan, United States</i>		MULTISAR: Partnering for Species at Risk Conservation <i>Katheryn T. Taylor, Canada</i>	Grazing and N-amendment impacts on soil nitrate-N supply rate <i>Vern Baron, Canada</i>	Evaluation of Indigenous Lotus Species from the Western USA for Rangeland Revegetation and Restoration <i>Douglas A. Johnson, United States</i>
11:30-11:45	Present status and sustainable management of grasslands in Indian Himalayas <i>Mahendra Singh Pal, India</i>		Planning for rangeland biodiversity at the regional scale: Highlights from Alberta's Biodiversity Management Frameworks <i>Shannon R. White, Canada</i>	Managing the Land and Vegetation - the Conundrum of Livestock Performance versus Vegetation Response <i>Roy Roath, United States</i>	Evaluation of a Bermudagrass Core Collection <i>William Anderson, United States</i>
11:45-12:00	Application of the rangeland hydrology and erosion model to ecological site descriptions and management <i>C. Jason Williams, United States</i>		Pastoral Wildlife Conservancies in Kenya: A Bottom-up Revolution in Conservation, Balancing Livelihoods and Conservation? <i>Robin S. Reid, United States</i>	Improvement of Cattle Grazing Distribution through Genetic Selection: Challenges and Opportunities <i>Derek W. Bailey, United States</i>	Evaluation and utilization of <i>Leymus chinensis</i> germplasm resources <i>Gongshe Liu, China</i>
12:00-13:00	Lunch (Location: Centennial Hall A)				
13:00-14:30	Plenary Session 2. Ecological Goods & Services of Rangelands and Pasturelands				
Room	Salon C, D				
	Rangeland Goods and Services: Identifying Challenges and Developing Strategies for Continued Provisioning <i>Dr. David Briske, Professor, Rangeland Ecology, Texas A&M University, United States</i>				
	Toward a Culture of Range: The Role of Society in Protecting Rangeland Ecological Goods and Services <i>Don Gayton, Ecologist & Writer, Summerland, British Columbia, Canada</i>				
14:30-15:00	Networking Break				
15:00-16:30	Concurrent Oral Sessions				

Themes	1. Nutritional links from soil to plant to livestock to people	2. Carbon sequestration in rangelands	3. Water supply and quality	4. Wildlife habitat for endangered species	5. Grazing management practices (2)
Room	Gallery Suites	Gallery A	Gallery B	Gallery C	Gallery D
Moderator	Vern Baron	Xying Hao	Sherman Swanson	Peggy Strankman	Cathie Erichsen Arychuk
15:00-15:15	Botanical composition of the diet of camels grazing at Kalemendo district, North Darfur State, Sudan Babo Fadlalla, Sudan	Trade-offs between management of grazing intensity, soil carbon and biodiversity Cathleen M. Waters, Australia	Livestock and fire management influence fundamental supporting and regulating ecosystem services of grassland ecosystems: the interacting roles of species, vegetation structure and rainfall intensity on the redistribution of water Elisabeth Huber-Sannwald, Mexico	Bovids, Bugs and Birds: Livestock Avermectins; A Threat to Grassland Birds? Wes Olson, Canada	Grazing management for biodiversity conservation and landscape function in semi-arid New South Wales Sarah E. McDonald, Australia
15:15-15:30	Effect of grazing systems on volatile compounds in subcutaneous fat on Tan lamb Hai-ling Luo, China	The implications of the emerging carbon economy for the management of the rangelands of Western New South Wales John Gavin, Australia	Estimating Rangeland Runoff, Soil Erosion, and Salt Mobility and Transport Processes Mark A. Weltz, United States	Native and exotic seed grasses preferences by grassland birds Alicia Melgoza, Mexico	Spinescence and the keystone plant <i>Acacia tortilis</i> ssp. <i>tortilis</i> in the arid Middle East: adjusting architecture to deter different herbivores Ahmad K. Hegazy, Egypt
15:30-15:45	Effects of N addition and stocking rate on the soil nitrogen mineralization rate of typical steppe in the Loess Plateau, China Hou Fujiang, China	Taking account Carbon sequestration of pasture in carbon balance of cattle ranching systems established after deforestation in Amazonia Vincent Blanfort, France	Promoting resilience by influencing water infrastructure development in community managed rangelands of Kenya: case study of Isiolo County Yasin Mahadi Salah, Kenya	Multiple Approaches to Habitat Conservation: Finding the Right Fit Encourages Producers to Manage for Species at Risk Habitat Tom Harrison, Canada	Litter Retention – some is good, but can there be too much of a good thing? Eric. G. Lamb, Canada
15:45-16:00	Productivity and quality of range grasses and traditional forage crops in Tarai region of Indian Himalayas Mahendra Singh Pal, India	Methane and nitrous oxide emissions from cattle dung and urine patches on a tame pasture Xiyang Hao, Canada	Strategic supplementation to manage movement of beef cows on hills Rebecca E. Hickson, New Zealand	From Idle back to Working: Evidence of endangered species conservation efforts changing rangeland management policy in the western United States Sheila Barry, United States	Interactive effects of grassland plant diversity and herbivore grazing on litter decomposition Ling Wang, China
16:00-16:15	Preference of Range Plant Species as Assessed by Pastoralists' Perception and Actual Empirical Determinations in a Semi Desert Area in Sudan Mohammed Abdelkreim, Sudan	Estimation and Economic Valuation of aboveground Carbon Storage (Case Study: Semi-Steppe Rangelands of Middle Alborz Mountains) Shafagh Rastgar, Iran	Integrated Lentic Riparian Grazing Management Sherman R Swanson, United States	Multi-stakeholder approach to piloting a conservation offset tool in Southeastern Alberta Karen Raven, Canada	Improving the production of grazing lands using different management practices in west Shoa zone of Ethiopia: The case of Ejere district Abule Ebro Gedda, Ethiopia
16:15-16:30	Livestock and Forage Production in Afghanistan Hayatullah Esmati, Afghanistan	Grazing and soil carbon: comparing effects of management strategy across vegetation types Megan McSherry, United States	Collaboration on the Mokelumne Watershed to Assure Water Quality and Preserve Working Landscapes Theresa Becchetti, United States	Effects of the rapidly changing habitat of the Liben Lark Bruktawit A Mahamued, UK	Effects of Arbuscular mycorrhizal fungi on aboveground biomass in relation to distance from livestock watering points in typical steppe Yingjun Zhang, China
16:30-18:00	Poster Session (for papers submitted in Themes 1.1 to 2.5)				

Tuesday, July 19 2016

8:30-10:00					
Plenary Session 3. The People of the Grasslands					
Room	Salon C, D				
	Pastoralists in the 21st Century: “Lo-Tech” Meets “Hi-Tech” <i>Dr. Ann Waters-Bayer, Senior Advisor, Prolinnova International Support Team, ETC Foundation, Germany</i>				
	Canadian Indigenous Peoples and Arctic /Grassland Use <i>Ryan Brook, Assistant Professor, Department of Animal & Poultry Science, University of Saskatchewan; Indigenous Land Management Institute</i>				
10:00-10:30					
Networking Break					
10:30-12:00					
Concurrent Oral Sessions					
Themes	1. Changes to pastoral systems around the globe (1)	2. Privately owned and leased rangeland systems	3. Changes to pastoral systems around the globe (2)	4. Professional extension and technology-transfer	5. Social justice issues in rangelands
Room	Gallery Suites	Gallery A	Gallery B	Gallery C	Gallery D
Moderator	Eric Lamb	Cameron Kayter	Carolyn Ireland	Lynne Pinder	Duane McCartney
10:30-10:45	New way to manage grazing livestock system in degraded grassland based on system economics <i>Goudong Han, China</i>	Cowboys or grass farmers? <i>Colin J. Paton, Australia</i>	The shift from pastoral to agro-pastoral livelihood: current challenges and future research priorities <i>Shinan Kassam, Egypt</i>	Western Beef Development Centre 1998 to 2018: combining research and extension for the benefit of the Saskatchewan beef industry Bart Lardner, Canada	Environmental Imperialism and Greening Dispossession: Social Justice in East Africa's Rangelands <i>V. Corey Wright</i>
10:45-11:00	Vulnerability and adaptation of Borana pastoralists to social-ecological change in southern Ethiopia <i>James E. Bennett, UK</i>	Managing for Biodiversity: A Rancher's Perspective <i>Hyland Armstrong, Canada</i>	Enabling environment for pastoralists by bridging practice and policies <i>Margherita Gomasasca, Belgium</i>	The use of a knowledge broker to counteract remoteness in delivering appropriate climate change knowledge in the Australian Rangelands <i>Kate Forrest, Australia</i>	
11:00-11:15	Cross-Level Governance of Common Property Rangelands: Three Cases from East Africa <i>Lance W. Robinson, Kenya</i>	/	The effect the highland clearances had on the Scottish uplands <i>Andrew Brewster, Scotland</i>	Evolving deployment of Extension resources for rangelands in Wyoming: moving from county generalist to regional specialist <i>John Scasta, United States</i>	
11:15-11:30	Ecological-Cultural Feedbacks in Mongolian Social-Ecological Systems <i>Maria E. Fernandez-Gimenez, United States</i>	Social and Economic Characteristics of Public Lands Ranchers in the United States: Results of a 2015 Survey <i>Kristie A. Maczko, United States</i>	A framework for studying the drivers of grazing systems intensification in the tropics <i>Cecile Godde, Australia</i>	Pasture and Grazing Management Extension Programing in Northwestern USA <i>Glenn Shewmaker, United States</i>	Grazing land and herder's policy – some pertinent issues in Indian context <i>Ajoy Roy</i>
11:30-11:45	Perception and awareness of pastoralsits towards livestock marketing and products in Butana area, Sudan <i>Babo Fadlalla, Sudan</i>	Lease rangeland systems: A Saskatchewan case study <i>Brant Kirychuk, Canada</i>	Ecological intensification in “Livestock - Local Development” Interaction <i>Benoit Dedieu, France</i>	The Impact of Applied Research and Forage Associations Extension Network on the Viability of Alberta Farmers and Ranchers <i>Alyssa A. Krone, Canada</i>	Small-scale farmers' knowledge of livestock-rangeland management practices in the Gauteng Province, South Africa <i>Lucas Letsoalo, South Africa</i>

11:45-12:00	Linkages between livestock, rangeland condition, water and people' well-being: A Pilot study on the perceptions of the communal farmers in the rural Eastern Cape, South Africa <i>Andiswa Finca</i>	The Problem of Speaking for Ranchers: Reflexive Social Research in the Multifunctional Rangeland Context <i>Hailey Wilmer, United States</i>	Influences of institutional designs on social outcomes of Community-Based Rangeland Management in Mongolia <i>Tungalag Ulambayar, Mongolia</i>	Technology Transfer: Delivering Research Extension to producers in a Technology World <i>Andrea L. M. White</i>	The use of the Rangeland NRM Alliance to overcome issues caused by isolation through collaboration and support <i>Kate Forrest, Australia</i>
12:00-13:00	Lunch (Location: Regal A and B)				
13:00-14:30	Plenary Session 4. Multiple Use of Rangelands				
Room	Salon C, D				
	Resource Extraction Impacts in Asia <i>Dr. Purevsuren, Director, Nature Conservation Fund, Ministry of Nature and Green Development, Mongolia</i>				
	Evaluating Energy Development Effects on North American Rangelands <i>Dr. Urs P. Kreuter, Texas A&M University, United States</i>				
14:30-15:00	Networking Break				
15:00-16:30	Concurrent Oral Sessions				
Themes	1. Energy development and reclamation of industrial disturbances	2. Fire management and restoration in rangelands	3. Cropland abandonment, revegetation with perennial forages, and re-used as rangeland	4. Invasive species impacts and management in rangelands	5. Wildlife conflicts and commercial wildlife utilization opportunities
Room	Gallery Suites	Gallery A	Gallery B	Gallery C	Gallery D
Moderator	John Hendrickson	Michael Fitzsimmons	Nityananda Khanal	John Hauer	Julie Landry-DeBoer
15:00-15:15	Perennial rangeland grasses for bioenergy <i>Susanna Feldman, Argentina</i>	Restoring Fire to Grasslands: An overview <i>Donald Thompson, Canada</i>	Seedling growth of three forage shrubs under four radiation environments for revegetation purposes <i>Federico Villarreal-Guerrero, Mexico</i>	When tame species go wild: Plant biodiversity loss associated with Bromus inermis encroachment in unseeded grasslands <i>James F. Cahill, Canada</i>	Indigenous Nomadic rangeland practices and its impact on rural livelihood <i>Portia G. Oware Twerefoo, Ghana</i>
15:15-15:30		Fire Seasonality and Return Interval Effects in Northern Mixed Prairie <i>Lance Vermeire, United States</i>	Planting Time and Grass Mixtures Affect Forage Kochia Establishment <i>M. Anowarul Islam, United States</i>	Spray it, wipe it, eat it – demonstration of different noxious weed control options on Saskatchewan Rangelands <i>Nadia Mori, Canada</i>	Grazing resource partitioning on the eastern slopes of Alberta <i>Mark Lyseng, Canada</i>
15:30-15:45	Factors Regulating Long-Term, Large-Scale Grassland Community Assembly <i>Matthew J Rinella, United States</i>	The need for grazing fine fuels after wet periods <i>Sherman Swanson, United States</i>	Effect of Particle Size of Para Grass (<i>Brachiaria mutica</i>) and Maize Grain on Intake, Digestibility and Growth Performance of Crossbred Heifers under zero grazing condition in Bangladesh <i>M. A. Samad Khan, Bangladesh</i>	Ecology and Management of Saltcedar <i>Walter Fick, United States</i>	Agriculture Conflicts with Rocky Mountain Elk in the Cariboo-Chilcotin <i>Tim A. Singer, Canada</i>
15:45-16:00	Dynamics of vegetation, biological soil crusts, and seed banks along pipelines in Southern Alberta's Mixedgrass Prairie <i>Lysandra Pyle, Canada</i>	Factors Affecting the Use of Intensive Prescribed Fire by Landowners in the Southern Great Plains <i>Urs Kreuter, United States</i>	Support for survival and sustenance to the marginalised people from the semi arid lands of southern districts of Tamilnadu, India <i>Murugesan Ramamoorthy, India</i>	Indian couch (<i>Bothriochloa pertusa</i>) Invasion in Queensland, Australia: Development of an R&D Project to Address Loss of Productivity in Pastures <i>Nicole Spiegel, Australia</i>	

16:00-16:15	Landowner, operator perspectives on energy-related impacts to natural, agricultural, and social resources in the Bakken oil patch Devan Allen McGranahan, United States	Targeted Grazing to Manage Wildland Fuels and Alter Fire Behavior Karen L. Launchbaugh, United States		Maasai Pastoralists' livelihoods threatened: The case of Pastoralist Field Schools in controlling Ipomoea spp in Kajiado County, Kenya Hedwig C. Nenkari, Kenya	
16:15-16:30	The Range Supply Review: A management strategy for a landscape with multiple users Tyler J. Morhart, Canada	Fire as a management ecological tool for restoration of degraded rangeland ecosystems for livestock grazing in Uganda Elly N. Sabiti, Uganda		Who Fenced the Dogs Out? Collaborative Area Management in South West Queensland Catherine Crowden, Australia	
16:30-18:00	Poster Session (for papers submitted in Themes 3.1 to 4.5)				
Wednesday, July 20 2016 Mid-congress Tour Day					
Thursday, July 21 2016					
8:30-10:00	Plenary Session 5. Range and Forage of High Latitudes and Altitudes				
Room	Salon C, D				
	Rangelands of Subarctic and Arctic North America and Europe: Ecosystems, Wildlife and Management Dave Downing, Vegetation Ecologist, Alberta, Canada				
	Sustainable Rangelands, Sustainable Pastoralism in Yak Herding Areas of the Greater Tibetan Plateau Marc Foggin, Acting Director/Scientist, Mountain Societies Research Institute, Mongolia				
10:00-10:30	Networking Break				
10:30-12:00	IRC Business Meeting - All Delegates to Attend				
12:00-13:00	Lunch (Location: Regal A and B)				
13:00-14:30	Plenary Session 6. Climate Change in Rangelands				
Room	Salon C, D				
	The Resilience of Western Rangeland: Exposure to 9,000 Years of Climate Variability Dave Sauchyn, Professor, University of Regina; Research Coordinator, Prairie Adaptation Research Collaborative, Regina, Saskatchewan, Canada				
	Climate Change in Global Rangelands: A Dryland Ecologists Perspective on Trends in Forage Quantity and Quality Jan C. Ruppert, Assistant Professor, Institute of Evolution and Ecology, University of Tuebingen, Tuebingen, Germany				
14:30-15:00	Networking Break				
15:00-16:30	Concurrent Oral Sessions				

Themes	1. Plant adaptations to climate change	2. Livestock and grazing system adaptations to climate change	3. Water supply and quality impacts from climate change & Historic & cultural response and adaptations to drought in grasslands	4. Modeling future human and climate change in arid and semi-arid areas	5. Range and forage in high latitudes and altitudes
Room	Gallery Suites	Gallery A	Gallery B	Gallery C	Gallery D
Moderator	Candace Neufeld	Kerry Hecker	Dana Kelly	Andres Cibils	Susana Feldman
15:00-15:15	Biomass Productivity and Fodder trees/shrubs adaptation to Climate Change based on natural Rangeland management at Kordofan Region – Sudan Mohammed Abdelkreim, Sudan	Flexible Stocking Strategies for Adapting to Climatic Variability Justin D. Derner, United States	Water from Rangelands: Climate and Responsive Management Terry Booth, United States	Temperature and precipitation influences on grassland production across natural subregions of southern Alberta Tanner S. Broadbent, Canada	Mountain Grazing on Alpine Summer Farms in Switzerland: Ecosystem Services of a Pasture Landscape Felix Herzog, Switzerland
15:15-15:30	Seasonal Variation of Greenhouse Gas Fluxes in Alpine Meadow on Qinghai-Tibetan Plateau Fu-jiang Hou, China	Climate Clever Beef: maintaining profitable beef businesses in a changing climate Kiri Broad, Australia	Bringing rangelands into the backyard: Educating urban audiences about rural landscapes Mae Smith, United States	Modeling spatial distribution changes of a Moroccan sylvopastoral tree under climate change (e.g. <i>Argania spinosa</i> L. Skeels) Lahssini Said, India	Strategies to improve rangelands in high altitude regions of India for livestock production Murari Roy, India
15:30-15:45	Climate warming and long-term trends in Saskatchewan hay yield Paul G. Jefferson, Canada	Mongolian Rangeland Changes with a Changing Climate Magsar Erdenetuya, Mongolia	Climate Compatible Development in Mongolia: Analysis of vulnerability and adaptation response to global changes Dennis S. Ojima, United States	Modelling the impact of human and climate change on <i>Stipa tenacissima</i> distribution in the arid and semi-arid rangelands of North Africa Mounir Louhaichi, Jordan	Effects of three plant litterwater extraction on plant community characteristics in the alpine meadow of Qinghai-Tibetan Plateau Li Yue, China
15:45-16:00	Evolution of the production of megathermal species in the pampas central Monica Sacido, Argentina	Modelling adaptation and mitigation strategies for Maori livestock farms in Aotearoa New Zealand Tanira Kingi, New Zealand		Environmental resilience of rangeland ecosystems: assessing climate-driven land degradation in arid and semi-arid zones of Central Asia Dildora Aralova, Uzbekistan	An Ecological Site Approach to Select Range Improvement Practices on Andean Rangelands Melody R. Zarria, Peru
16:00-16:15	Diversity for C3 and C4 plant types in guinea grass reveals its high potential as climate resilient species Devendra Malaviya, India	Rangeland Database Development for a Livestock Early Warning System in the Puna region of Peru Javier A. Naupari, Peru			A Community-Based Approach to Identifying Grazing Pressure and Land Use Management Structures among Herders in the Altay Mountains, Mongolia Brianne A. Altmann, Germany
16:15-16:30	Potassium and sodium simultaneously plays a positive role in responding to drought stress in <i>Apocynum venetum</i> Suo-Min Wang, China	Does Holistic Planned Grazing work in rangelands? A global meta-analysis Heidi-Jayne Hawkins, South Africa			Transhumance implications in the Upper Noun drainage floodplain wetlands in Cameroon Bongakrem Carine Sushuu, Cameroon
16:30-18:00	Poster Session (for papers submitted to Themes 5.0, 6.1 to 7.5)				
Friday, July 22 2016					
8:30-10:00	Plenary Session 7. Grazing Land Assessment & Management in a High-Tech World				
Room	Salon C, D				

	Knowledge Tools for Sustainable Rangeland Resource Management: The Alberta Rangeland Ecology Tool Kit <i>Barry Adams, Rangeland Extension Specialist Lethbridge, Alberta, CANADA</i>				
	Impact of Communication Technologies on Pastoralist Societies <i>Ed Charmley, Program Leader, Livestock Environmental System, Australian Tropical Sciences and Innovation Precinct, James Cook University, Townsville, Queensland, AUSTRALIA</i>				
10:00-10:30	Networking Break				
10:30-12:00	Concurrent Oral Sessions				
Themes	1. Technology in land resource data acquisition and modeling	2. Technology in social and psychological data acquisition and modeling	3. Technology in animal movement data acquisition and modeling	4. Technology in education and extension	5. Technology in fencing, water supply, and livestock health
Room	Gallery Suites	Gallery A	Gallery B	Gallery C	Gallery D
Moderator	Karen Launchbaugh	Terry Kowalchuk	Miranda Meehan	Stephanie Larson	Trevor Lennox
10:30-10:45	Grassland mapping, measuring, monitoring, modeling, and prediction (4MP) using remote sensing methods <i>Xulin Guo, Canada</i>	Cartography of pastoral vegetation communities in North African arid saline rangelands: the case of Tunisia <i>Ghassen Chaieb, France</i>	The drivers of livestock forage preference in Australian heterogeneous (non-uniform) paddocks <i>Jaime Manning, Australia</i>	Developing web applications to aid grazer decision making <i>David R. Stevens, New Zealand</i>	Holistic management in a semiarid Patagonian sheep station: slow grassland improvement with animal production complications <i>Gabriel E. Oliva, Argentina</i>
10:45-11:00	Mapping Canada's Rangeland and Forage Resources using Earth Observation <i>Emily Lindsay, Canada</i>	Exploring dynamics of evapotranspiration in a semi arid grassland of South Africa <i>Onalenna Gwate, South Africa</i>	Use of a UAV-mounted video camera to assess feeding behavior of Raramuri Criollo cows <i>Andres Cibils, United States</i>	Technology in Education and Extension <i>Nadia Mori, Canada</i>	Efficacy of garlic and neem seed extract as control gastrointestinal parasites in goats grazing on rangeland <i>Aldo Sales, United States</i>
11:00-11:15	A Risk-based Vulnerability Approach for Rangeland Management <i>Mariano Hernandez, United States</i>	Detecting and mapping the last frontiers of Savanna Grasslands of the western high plateau of Cameroon <i>Stephen K. Ndzeidze, United States</i>	The effects of seed ingestion by livestock, dung fertilization, trampling, grass competition and fire on seedling establishment of two woody plant species <i>Julius Tjelele, South Africa</i>	Manitoba Beef & forage Initiatives Inc. - A New Public/Private Collaborative Model for Supporting Beef and Forage Research <i>Duncan Morrison, Canada</i>	Aboveground biomass accumulation of Eastern Mongolian <i>Stipa grandis</i> community <i>Khongorzul Otgon, Mongolia</i>
11:15-11:30	Assessing the provision of ecosystem services in Alberta's rangeland using a modeling approach <i>Majid Irvani, Canada</i>	Rangeland Data Acquisition: Lessons Learned from Mobile Tool Development <i>Nancy J. Elliot, Canada</i>	The Digital Homestead assists rangeland managers to make timely and informed decisions <i>Ed Charmley, Australia</i>	Extension Priorities Guide Ranch Stewardship Mapping Curriculum <i>Will R. Boyer, United States</i>	Driving Miss Daisy; Factors controlling sheep behaviour in Australian Grasslands <i>Lachlan Ingram, Australia</i>
11:30-11:45	Improving the framework of State and Transition Model for condition assessment of <i>Artemisia</i> spp. rangelands in Uzbekistan <i>Toshpulot F. Rajabov, Uzbekistan</i>	Estimating vegetation biophysical and biochemical properties using remote sensing and modeling in a semi-arid grassland <i>Bing Lu, Canada</i>	Alternative breeding scenarios for Abergelle goat breed suited to Arid climate in Ethiopia <i>Temesgen Jembere Bakara, Ethiopia</i>	From Farmers to Farmers and from Researchers to the Public at Large: Films for Communicating Best Practices and Research Findings <i>Felix Herzog, Switzerland</i>	
11:45-12:00	The NRM Spatial Hub – turning big data into decisions in the paddock <i>Phil Tickle, Australia</i>	A Prototype Application of State and Transition Simulation Modelling in Support of Grassland Management <i>Matt Reeves, United States</i>		Precision Pastoral Management System: automated 'big data' analysis for pastoral properties <i>Sally L. Leigo, Australia</i>	
12:15-13:00	Lunch (Location: Regal A and B)				
13:00-14:30	Land Manager's/ Farmer's Forum - All Delegates Invited to Attend				

Room	Salon C, D
Moderator	Brant Kirychuk
13:00-13:30	Forages in a Systems Approach <i>Duane Thompson, Tee Two Land & Cattle Company, Kelliher, Saskatchewan, CANADA</i>
13:30-13:40	A Rancher's View - The Grasslands Project - Canadian Video Series <i>10 minute video featuring souther Saskatchewan rancher, Miles Anderson's, operation.</i>
13:40-14:10	How We Manage Our Native Prairie <i>Leanne Thompson, Living Sky Beef, Ceylon, Saskatchewan, CANADA</i>
14:10-14:30	Introduction of Australian Videos <i>Kiri Broad, Queensland Department of Agriculture & Fisheries, Australia</i>
	International Video 1: Counting grass in northern Australia: from little measurement, big decisions are made. <i>Stewart Taylor, Northern Australia Pastoral Co., Australia</i>
	International Video 2: Exclusion fencing: managing pests to maintain grazing outcomes in Australia <i>Peter and Elizabeth Clark, Australia</i>
15:00-16:00	Closing Session & Summary
	<i>Ray Smith, University of Kentucky, United States</i>
	<i>Maria Fernandez-Gimenez, Colorado State University, United States</i>
	<i>Don Burnside, DG Burnside & Associates, Australia</i>
18:00-21:00	Closing Banquet & Entertainment by Saskatchewan Express (Regal A and B)