

## Programme: New Zealand Grassland Association Conference

### Hosting the New Zealand Society of Animal Production and Agronomy NZ

#### Day One: Tuesday

Registration    Ascot Park Hotel, Invercargill    Monday 4:30-6:30 pm and Tuesday 7:30 am

8:30	SESSION 1: Grazing the Deep South, Chair Warren King		Sponsor: AgResearch
8:30	Laurie Copland (President NZGA)	Welcome to the Conference	
8:35	Chris Smith (Chair LOC)	LOC Chair welcome	
8:45	Sue Bidrose (AgR CE)	The approach of a new era of public-good science funding	
9:00	Jeff Grant ( <i>Thriving Southland</i> )	Thriving Southland: the future	
9:15	Ronaldo Vibart	Greenhouse gas emissions from New Zealand sheep and beef farms	
9:30	Jacqueline Rowarth	New-generative agriculture based on science, informed by research and honed by New Zealand farmers	
9:45	Tricia Johnson	A review of the current sheep industry in New Zealand and opportunities for change to meet future challenges	
CONCURRENT NZGA, NZSAP and Agronomy SESSIONS			
10:30	Warren King	NZGA Presidential Address	
10:50	SESSION 2A: Grasslands, Chair Alistair Black		Sponsor: Grasslanz
10:55	Sonya Olykan	AgYields - a national database for collation of past, present and future pasture and crop yield data	
11:05	Katherine Tozer	Effect of deferred grazing during late spring and summer on pasture productivity in Waikato and Bay of Plenty	
11:15	Gerald Cosgrove	Persistence of perennial ryegrass, tall fescue and cocksfoot following sequential annual sowings: pasture yield, composition and density in three establishment years under cattle grazing in Waikato	
11:20	Katherine Tozer	Impact of pasture height and herbage mass on suppression of variegated thistle in North Island East Coast	
11:25	Thinzar Myint	Nitrogen effects on species' contributions to grazed pasture mixtures under nitrogen loss and application restrictions	
11:30	Jeff Morton	A summary of research results on pasture responses to fertiliser and lime in the South Island Hill and High Country	
11:35	FACILITATED DISCUSSION		
10:30	Nick Sneddon	NZSAP Presidential Address	
10:50	SESSION 2B: Animals, Chair Nick Sneddon		Sponsor: Beef+Lamb NZ
10:55	Sue McCoard	Impact of casein- versus whey-based lamb milk replacers on growth and health of artificially-reared lambs	
11:05	Tricia Johnson	Investigating the potential for global positioning satellite data to provide information on ewe behaviour around the time of lambing	
11:15	Laura Deeming	Investigating the pattern of lameness prevalence in dairy goats across the first two years of life	
11:20			
11:25	Rhiannon Hancock	Genetic parameters for urination traits and their relationships with production traits of grazing dairy cattle	
11:35	FACILITATED DISCUSSION		

## SESSION 2: CONCURRENT NZGA, NZSAP and Agronomy Sessions (TUESDAY contd)

10:30 *Craig McGill* Agronomy Presidential Address

10:50 SESSION 2C: Crop Physiology

10:55 *Lauren Jones* The impact of different post-harvest residue management practices on a Tall Fescue (*Festuca arundinacea*) seed crop with full straw load retained

11:05 *Colin Eady* Relative *Epichloë* endophyte fungal biomass in ryegrass tillers grown pre and post vernalization

11:15 *Henk van Zyl* Evaluation of tillage practices for maize in a rotation system for market gardening in the Waikato region of New Zealand

11:25 *Emmanuel Chakwizira* Yara N-tester chlorophyll meter calibration: a prequel

11:35

### FACILITATED DISCUSSION

## SESSION 3: CONCURRENT NZGA, NZSAP and Agronomy Sessions

11:50 SESSION 3A: Legumes, Chair *Laura Keenan*

Sponsor: **Agricom**

11:55 *Angus Heslop* Response of white clover cultivars to sheep and beef cattle grazing management across three pastoral environments in NZ

12:05 *John Chapman* Legumes are the key to increasing productivity at 'Inverary', a summer moist hill/high country farm in mid-Canterbury

12:15 *Sonya Olykan* Refining foliage sampling protocols for white clover

12:20 *Sonya Olykan* Growth rates and persistence of annual and perennial clovers

12:25 *David Stevens* Can *Lotus pedunculatus* over-sowing in low fertility hill country increase farm resilience?

12:30 *Grace Echoe*

Developing genomic selection for dry matter yield in white clover

12:35

### FACILITATED DISCUSSION

11:50 SESSION 3B: Animal Behaviour, Chair *Rene Corner-Thomas*

Sponsor: **DairyNZ**

11:55 *Lucy Hall* Changes to cow behaviour when transitioning from twice a day to a 3-in-2 milking schedule

12:05 *Natalia Martin* Temperament of hand-reared beef-cross-dairy cattle does not influence production traits

12:15 *Gavin Sheath* Grazing behaviour of young cattle around faecal pats

12:20

12:25 *Tricia Johnson* Preliminary investigations into genetic variation in distance travelled by young sheep

12:35

### FACILITATED DISCUSSION

11:50 SESSION 3C: Forage Crop management

11:55 *Wayne Nichol* The benefit of precision planted, pelletised swede seed when sown in cultivated soil in Canterbury and Southland

12:05 *Steve Dellow* Sowing strategy of winter-sown oats catch crops affects crop development and nitrogen uptake

12:15 *Aung Thant* Productivity and quality of kale, swede, fodder beet and maize in Manawatu

12:25

### FACILITATED DISCUSSION

## Day One: TUESDAY Field trip Options

<b>Option 1</b>	<b>SESSION 4A: Southern Dairy Hub Field trip</b>	<b>Sponsor: DairyNZ</b>
<b>Option 2</b>	<b>SESSION 4B: Agronomy field trip: Blueberry Country and Auld Distillery (pre-registration required—limited to 60 participants).</b>	
<b>12:50</b>	<b><i>Board the buses</i></b>	
<b>5:00 pm</b>	Depart field tour venues	
<b>5:45 pm</b>	<b>Bill Richardson Transport Museum—Drinks and Light meal</b>	<b>Sponsor: Ballance Agri-nutrients</b>
<b>7:20 pm</b>	<b>NZ Grassland Trust Awards, Life Membership presentation</b>	
<b>10:00 pm</b>		<b>Finish Day One</b>

## Day Two: WEDNESDAY

<b>8:00</b>	<b>Keynote Address: NZGA Levy Oration/Living Legends</b>	<b>Chair: Warren King</b>
<b>8:35</b>	<b>SESSION 5: International , Chair Mike Dodd</b>	<b>Sponsor: Dominion Salt</b>
<b>8:40</b>	<i>Cameron Ludemann</i>	Forage Value Index for Sheep and Beef
<b>8:50</b>	<i>Norton Atkins</i>	Outwintering in the UK
<b>9:00</b>	<i>Mancoba Mangwe</i>	Partial replacement of ryegrass and clover herbage with chicory to alter urination behaviour and soil nitrogen loading of grazing dairy cows
<b>9:10</b>	<b>SESSION 6: Young Presenters, Chair Nick Sneddon</b>	<b>Sponsor: Massey University</b>
<b>9:15</b>	<i>Jacqueline Peers-Adams</i>	An evaluation of the FeedSmart app
<b>9:20</b>	<i>Charlie Bennett</i>	Can GreenFeed automated emissions monitoring systems measure methane output from young red deer grazing pasture?
<b>9:25</b>	<i>Yuxin Fu</i>	Effect of concurrent pregnancy on the persistency of lactation in dairy cows milked once a day
<b>9:30</b>	<i>Swati Jivanji</i>	Genome-wide association study of UV-protectant circumocular pigmentation in Hereford cattle
<b>9:35</b>		<b>FACILITATED DISCUSSION</b>
<b>9:45</b>	<i>David Chapman</i>	Greener Pasture: reporting back from the Resilient Pastures Symposium
<b>9:55</b>		<b>MORNING TEA</b>

Day Two: WEDNESDAY					
10:15	SESSION 7A: Advanced Genetics, Chair Rhannon Handcock		Sponsor: Barenbrug	SESSION 7B: A Changing Climate, Chair Jo Kerslake	
10:20	Michael Lee	Genomic evaluations of sheep in New Zealand	Mhairi Sutherland	Do cows with facial eczema feel pain?	Sponsor: Fonterra
10:30	Sai Arojiu	Forecasting the genetic and economic impacts of genomic selection in perennial ryegrass	Andrew Fletcher	Emissions improbable: how inappropriate use of the Global Livestock Environmental assessment model can overestimate the emissions associated with dairy production chains	
10:40	David Scobie	Dominant mutation(s) for low fibre curvature in the wool of sheep	Stephanie Langer	Improving irrigation management on hill slope pastures	
10:45	Michael Lee	Optimising a panel of single nucleotide polymorphisms for genomic prediction in New Zealand sheep	Stephanie Langer	Understanding water losses from irrigated pastures on loess-derived hillslopes	
10:50	Marty Faville	Genomic assessment of white clover and perennial ryegrass genetic resources	Rene Corner-Thomas	A comparison of the lamb performance of Romney and F1 Wiltshire crosses to weaning	
10:55	Marty Faville	An empirical assessment of a genomic breeding strategy in perennial ryegrass	Sam Peterson	The effects of out-of-season breeding on wool production and lamb birth weight	
11:00-11:10 FACILITATED DISCUSSION					
11:15	SESSION 8A: Wintering, Chair Dawn Dalley		Sponsor: PGG Wrightson Seeds	SESSION 8B: N in the Environment, Chair Jane Chrystal	
11:20	Matt Canton	Farming with reduced winter cropping: the risks and practicalities	Sarmini Maheswaran	Effects of alternative forages on nitrate leaching under intensive sheep grazing	Sponsor: Hill Laboratories
11:30	Andrew Dumbleton	Grasslands development of 'Pallaton' Raphanobrassica	Alistair Black	Nitrate effects on N2 fixation, growth and feed quality of lucerne and perennial lupin	
11:40	Graeme Pitman	Comparing a covered stand-off pad for on/off grazing during winter with conventional winter grazing	Chris Smith	Nitrogen leaching losses from fodder beet and kale crops grazed by dairy cows in southern Southland	
11:45	Roshean Woods	The effect of winter fodder beet or kale allocation on behaviour and blood metabolite status of non-lactating dairy cows	Tania Gunn	Quantification and mitigation of nitrogen leaching in a maize cropping system	
11:50	Roshean Woods	Impact of winter fodder beet or kale allocation on body condition score gain and early lactation performance of dairy cows	Ronald Vibart	Sheep dung disappearance from grazed hill country landscapes	
11:55	Tricia Johnson	Impact of winter near-maintenance or non-restricted feeding on growth and carcass characteristics of ram lambs			
12:00 FACILITATED DISCUSSION					
Day Two: Field Trips					
SESSION 9A: High performance Sustainable Farming					
12:50	Sponsor: Beef + Lamb NZ		SESSION 9B: Agronomy - Triflor Tulips (returning 3:30 pm)		
4:00 pm	Depart field tour venues				
5:30-6:30	Annual General Meeting of the Organisations				
7:00pm	Conference Dinner and Awards evening , Chairs NZGA, NZGT and NZSAP representatives		Sponsor AgResearch		

## Day Three: THURSDAY

**8:30 Keynote Address: Fifty years of Agronomy**  
**Sponsor: Agronomy Society**

### CONCURRENT SESSION

**9:05 SESSION 10A: Greenhouse Gases, Chair Jamie Ward**  
**Sponsor: NZAGRC**

*Anna Taylor* Winter crop choice and body condition loss  
change the eco-efficiency of sheep flocks

**SESSION 10B: Crop Input Management**

**Sponsor: Corteva**

*Tim Brooker* Does the timing and rate of magnesium fertilisers affect yield and quality of winter wheat?

*Ronaldo Vibart* Evaluation of existing equations to rank methane yields of sheep fed a range of fresh forages and forage crops

*Emmanuel Chakwizira*

*Maria Della Rosa* Volatile fatty acids in rumen samples collected before feeding had a stronger relationship than with post-feeding samples with methane production

*Fred Milford-Cottam*

*Tricia Johnson* Relationship between rumen attributes and meat and carcass traits in sheep divergently selected for methane yield

Effects of an organic seed treatment on the growth and yield of maize in the field

*Zac Beechey-Gradwell* Progress towards delivering high metabolizable energy perennial ryegrass

*Harry Wulff* Growth and dry matter accumulation of three hemp (*Cannabis sativa L.*) cultivars sown on three dates in Canterbury

### 9:45 FACILITATED DISCUSSION

### 10:00 Morning Tea

**10:30 Guest Speaker: Tangiroa Walker—Farm4Life, Chair Jo Kerslake**

**11:10 SESSION 11: Farm Systems (Animals), Chair Sue McCoard** **Sponsor: PGG Wrightson**

*Paul Edwards* The fate of calves born on New Zealand dairy farms and farmer attitudes towards producing dairy-beef calves

*Jamie Ward* Is there sire variation in seasonal liveweight gain of rising yearling red deer?

*Sue McCoard* Impact of change in body condition score in mid-late pregnancy in ewes fed a mixed diet on lamb survival and performance

*Grant Anderson* Using a pasture growth model to mitigate satellite estimation saturation

*Anna Taylor* Size of the prize: the value of closing pasture yield gaps on heterogeneous soil types in a dairy farm in Canterbury, New Zealand

*Racheal Bryant* Effect of farm system and milk urea phenotype on milk yield and milk composition of dairy cows in Canterbury

*Racheal Bryant* Effects of substituting autumn N fertiliser with GA on feed supply and milk production

### 12:00 FACILITATED DISCUSSION

**12:10 SESSION 12: Farm Systems (Pastures), Chair Laurie Copland** **Sponsor: Ravensdown**

*Mike Dodd* Quantifying the value proposition for white clover persistence on a New Zealand summer-dry hill-country farm

*Warren King* Variable-rate application of fertiliser – a new tool for farm system and environmental performance

*Sharon Lucock* Factors influencing fertiliser and lime decisions on South Island high- and hill-country farms

*Victoria Westbrooke* Potential profit gains from improving pasture productivity on New Zealand South Island high-country farms

### 12:45 FACILITATED DISCUSSION

**1:00 Closing and Invite to Rotorua 2023** **NZGA Chair**