

ADSS 2018 Symposium Program

Day 1: Wednesday 21 November 2018

TIME	SESSION TITLE	SESSION SPEAKERS
9:00	Registration and arrival - tea & coffee	
9:45	Introduction & Welcome	Danny Donaghy and David Pacheco
Session 1: Setting the scene - Dairying in 2030		
10:20	Invited Keynote Presentation 1: Identifying the challenges for dairy farming in the next 10+ years	Dr John Penno , ex-CEO, Synlait
11:00	Invited Keynote Presentation 2 : Defining resilience in dairy farm systems	Dr Brendan Horan , Teagasc Ireland Dr Dave Barber , Agri-Science Queensland
11:40	Open discussion & question and answer session featuring previous speakers in a panel	
11:55	Lunch then Mini-oral presentations	
Session 2: More productive, resilient and sustainable forage-based systems		
13:40	Invited Keynote Presentation 3: Manipulating the microbiome in forage science to solve the major challenges facing dairying in the next 10+ years	Dr Nigel Bell , AgResearch
14:20	Milk production from cows fed plantain-based pastures	S Navarrete, P Kemp, M Hedley, D Horne, J Hanley
14:30	The effect of grass ploidy and white clover inclusion on milk production of grazing dairy cows	B McClearn, T Gilliland, C Guy, M Dineen, F Coughlan, B McCarthy
14:40	Factors associated with profitability in pasture-based systems of milk production	L Hanrahan, L Shalloo
14:50	Association among pasture-level variables and grazing dairy cow responses to supplements	C Poole, D Donaghy, R White, J Roche
15:00	The changing role of extension in the grazing management learning process	L Turner, L Irvine, S Kilpatrick
15:10	Afternoon tea	
15:40	Invited Keynote Presentation 4: The role of forage management in solving the major challenges facing dairying in the next 10+ years	Dr Lydia Cranston , Massey University Dr Keith Pembleton , University of Southern Queensland
16:20	White clover incorporation at high nitrogen levels: results from a 3 year study	C Guy, D Hennessy, T Gilliland, F Coughlin, B McClearn, M Dineen, B McCarthy
16:30	Nutritive characteristics of perennial ryegrass cultivars - have they changed over time?	A Lawson, K Giri, M Rogers, S Muir, K Kelly, K Rentsch, S Chandra, J Jacobs
16:40	Pasture measurement data improves timeliness and confidence in grazing management decisions	L Irvine, L Turner
16:50	Genetic gain in dry matter production of perennial ryegrass cultivars at two sites in Victoria	A Lawson, K Giri, K Kelly, S Muir, M Rogers, K Rentsch, S Chandra, J Jacobs
17:00	Establishing plantain in spring in existing perennial ryegrass pastures in northern Tasmania	P Raedts, A Langworthy
17:10	Open discussion & question and answer session	
17:25	Day 1 concludes	
Welcome Function		
17:30	Te Manawa – 326 Main St, Palmerston North – Museum and home of the New Zealand Rugby Museum	
19:30	Welcome Function ends	

Day 2: Thursday 22 November 2018

TIME	SESSION TITLE	SESSION SPEAKERS
7:30	Registration and arrival - tea & coffee	
Session 3: More productive, resilient and sustainable animals		
8:30	Welcome and notices	
8:40	Invited Keynote Presentation 5: The frontiers of biomedical science and its application to animal science in solving the major challenges facing dairying in the next 10+ years	Prof Murray Mitchell , University of Queensland
9:20	Measuring immunocompetence in dairy cows	S Gupta, M Crookenden, S McCoard, A Khan, C Phyn, C Burke, J Roche, A Heiser
9:30	Grazed chicory, plantain, or ryegrass-white clover alters milk yield and fatty acid composition of late lactating dairy cows	C Mangwe, R Bryant, M Beck, P Gregorini
9:40	A profitability analysis of herds milked once-a-day	P Edwards
9:50	Profitable and resilient pasture-based dairy farm businesses	M Neal, J Roche
10:00	Morning tea	
10:30	Invited Keynote Presentation 6: Manipulating the microbiome in animal science to solve the major challenges facing dairying in the next 10+ years	Catherine Stanton , Teagasc/University College Cork Graeme Attwood , AgResearch
11:10	Defoliation dynamics, pasture intake and milk production of dairy cows grazing Lucerne pastures in a PMR system	K Ison, D Barber, M Benvenuti, N Kleinitz, D Mayer, D Poppi
11:20	Predicting milk fatty acids and energy balance of dairy cows in Australia using milk mid-infrared spectroscopy	H Phuong, T Luke, L Marett, W Wales, M Axford, E Oakes, J Pryce
11:30	Grain type offered to lactating cows during a heat challenge affects forage consumption	L Marett, J Garner, P Moate, W Wales , S Williams
11:40	Sources of phenotypic variation in bulk milk urea concentration in New Zealand herds	P Beatson, M Koot, N Cullen
11:50	Lunch then Mini-oral presentations	
Session 4: Social licence to farm		
13:40	Invited Keynote Presentation 7: Potential solutions to the major animal welfare issues facing dairying in the next 10+ years	Gosia Zobel , AgResearch John Roche , Ministry for Primary Industries
14:20	Variations in the concentration of energy and protein-related biochemical metabolites during the transition period in clinically healthy grazing dairy cows	S Hendriks, C Phyn, S-A Turner, K Mueller, D Donaghy, J Huzzey, J Roche
14:30	Method of placing sensors in the rumeno-reticulum does not influence recorded diurnal pH patterns in ruminal fluid	P Moate, M Hannah, J Jacobs, S Williams
14:40	Whole farm assurance programmes as a means to achieving best management practice dairy farming: A case study of the Synlait Milk Ltd 'Lead With Pride' programme	R MacArthur, M Wren
14:50	Electrical conductivity and daily activity to predict mastitis in a pasture-based automatic milking system	M Khatun, P Thomson, S Garcia
15:00	Feasibility of innovative sharemilking arrangements	E Schroer-Merker, P Tozer
15:10	Afternoon tea	
15:40	Invited Keynote Presentation 8: Potential solutions to the major water quality issues facing dairying in the next 10+ years	Dr Ranvir Singh , Massey University
16:20	Assessing the attenuation of sediment, phosphorus and nitrogen in surface runoff using detainment bunds in the Lake Rotorua catchment	B Levine, L Burkitt, D Horne, L Condron, C Tanner, J Paterson
16:30	Reducing nitrate leaching from the urine patch - a plant based approach	G Judson, A Moorhead, T Fraser, M Peterson, P Kemp, G Edwards
16:40	Irrigation Insight: Economic implications of altering irrigation scheduling	C Muller , M Neal, M Srinivasan, R Measures
16:50	White clover or nitrogen fertilizer for dairying under nitrate leaching limits?	D Chapman, I Pinxterhuis, S Ledgard, T Parsons
17:00	Influence of El-Nino Southern Oscillation and Indian Ocean Dipole Phases on Annual Pasture Production in South Eastern Australia	T Perera, B Cullen, R Eckard
17:10	Open discussion & question and answer session	
17:25	Day 2 concludes	
19:00	Symposium Dinner	

Day 3: Friday 23 November 2018

TIME	SESSION TITLE	SESSION SPEAKERS
8:00	Registration and arrival - tea & coffee	
Session 4 (continued): Social licence to farm		
08:30	Invited Keynote Presentation 9: Potential solutions to the major greenhouse gas issues facing dairying in the next 10+ years	Prof Richard Eckard , Melbourne University Dr Harry Clark , New Zealand Agricultural Greenhouse Gas Research Centre
9:10	Relationship of methane emissions with dry matter intake in New Zealand dairy cattle - a meta-analysis comparing measurement techniques	A Jonker, T van der Weerden, D Pacheco, C de Klein
9:20	The dairy workplace of 2030 - people, technology and connected communities	C Eastwood, J Greer, D Schmidt, J Muir, K Sargeant
9:30	Modelling nitrogen mineralisation in pasture-based systems: a comparison of agro-ecosystem models	M Harrison, R Rawnsley, R Eckard
9:40	Re-designing New Zealand dairy farming	A Romera, M Neal, A Bos
9:50	Morning tea	
Session 5: People and technologies as enablers of productive, attractive and resilient farm systems		
10:20	Invited Keynote Presentation 10: Getting value from artificial intelligence in agriculture, over the next 10+ years'	Dr Matthew Smith , Microsoft
11:00	A combination of automation technologies in rotary dairies was associated with increased labour efficiency but not milking throughput.	B Dela Rue, C Eastwood, P Edwards
11:10	Making virtual fencing work for individual dairy cattle	S Lomax, P Colusso, C Clark
11:20	Mental and emotional resilience in the face of troubling times in dairying	P Eats, R Scotney
11:30	The changing face of dairy in Victoria - are we ready for it?	Y Williams, S McDonald, S Chaplin
11:40	Responding to pressures to adopt sustainable practices: the demand for two-way communication	F van Noppen, J Reid, K Hytten, D Horne, L Burkitt
11:50	Open discussion & question and answer session	
12:05	Lunch	
Session 6: Conference end. What are the 2 key areas of focus from this conference that tie in with industry priorities and what does a joint Australian-New Zealand collaborative approach look like?		
13:05	Facilitated workshop A design-thinking approach to map out solutions to challenges facing dairying in the next 10+ years	Led by Prof Hamish Gow and Assoc Prof Brennon Wood , Massey University
15:30	Day 3 and conference ends	

Mini-oral presentations (34 x 3-minute presentations, each followed by 2 minutes of questions)

Identifying research priorities for establishing plantain on-farm	P Edwards, I Pinxterhuis
Endophyte alkaloid type had no effect on grazing preference for perennial ryegrass mini-swards	K Tozer, G Cosgrove, D Hume, W Mace, R Greenfield, C Cameron
Economic implications of restricted palm kernel use to meet the fat evaluation index grading system on New Zealand dairy farms.	T Chikazhe, C Glassey, R Davidson, J Kay, A Romera
Correcting for linear drift over time in ruminal pH and temperature sensors	S Williams, P Moate
Effect of winter crop on colostrum quality of dairy cattle	D Dalley, P Edwards, J Kay, W Ritchie
Milk production responses to heat events differs with stage of lactation	L Cheng, C Charlot, D Luo, F Dunshea, B Cullen
Effects of milking order in a dairy herd on access to pasture and milk production	B Cullen, H-M Weng, J Desfreres, L Cheng
Improved milk production from palm kernel treated with a <i>Trichoderma</i> extract	K Greaney, P Harrison
Hydroxy-selenomethionine is an effective selenium source for pregnant and growing heifers	M Briens, M Marco, Y Liu
Dietary supplementation of hydroxy-selenomethionine improves antioxidant status and selenium concentration in milk and plasma of mid-lactating cows reared in a selenium-deficient area in China	M Briens, D Pu, M Marco, Y Liu
Altering month of calving affects biophysical and economic performance in temperate pasture-based dairy systems	O Spaans, K Macdonald, M Neal, M Auldish, J Lancaster, A Bryant, G Doole, J Roche
Relationships between nitrogen inputs, outputs, surplus and losses in New Zealand dairy systems	D Chapman, K Macdonald, C Glassey, I Pinxterhuis, P Edwards, P Beukes
Selecting cattle for low residual feed intake did not affect daily methane production, but increased methane yield	H Flay, B Kuhn-Sherlock, K Macdonald, M Camara, N Lopez-Villalobos, D Donaghy, J Roche
Irrigation Insight: Co-innovating better water management practices on Canterbury dairy farms	A Fear, P Blackett, L Chen, T White, M Srinivasan, S Fitzherbert
Estimating pasture biomass with plant labs CubeSats	M Harrison, P Raedts, J Hills, R Rawnsley, M Asher
Reaching recommendations - a participatory approach to refining and prioritising future extension delivery in the Tasmanian dairy industry	A Hall, L Turner, S Kilpatrick
Milk yield has an impact of success of milking events in automatic milking systems (AMS)	F Masia, N Lyons, M Piccardi, M Balzarini, R Hovey, S Garcia
Variable-rate irrigation from pasture cameras	A McCarthy, J Hills, D McLaren, M White, K Boston, J Foley
Validation of a satellite pasture measurement system	G Anderson, L McNaughton
Future Dairy Farm Systems: A comparison between Manawatu and Canterbury	A Dooley, T Parminter, D Apparao, G Trafford
Regional variation in the nutritive characteristics of perennial ryegrass in the three dairying regions of Victoria	M Douglas, M Auldish, K Kelly, A Lawson, C Leddin, J Jacobs, S Garcia, W Wales
Pasture pest impacts and control options used on dairy farms in south-eastern Australia	S Kemp, P Umina, D Hume, A Popay, B Ciullen
Effect of feeding winter crops, designed to mitigate N loss, to early-lactation dairy cows	J Alabi, R Bryant, G Edwards
Viability of dairy-origin calves for a new beef production enterprise in New Zealand	J Hunt, N Schreurs, R Hickson, P Kenyon, S Morris, P Tozer
Carcass composition and meat quality of lightweight, dairy-origin steers	S Pike, N Schreurs, P Kenyon, R Hickson, S Morris
Changes in bite size and bite rate during grazing	M Wright, V Russo, L Marett, M Douglas, W Wales, J Jacobs, M Auldish
VitiFeed made from steam distilled grape marc can be included at 10% of the dairy cow diet with no reduction of milk production	B Cullen, B Mengersen, J Desfreres, F Dunshea, L Chen
Short-term dry matter intake and body weight changes of dairy cows	M Mardhati, L Gonzalez, C Clark, S Lomax, S Garcia
Colostrum management practices affect the small intestine development, serum IGF-1 and feed conversion in dairy calves	P van Keulen, A McCoard, J Dijkstra, M Khan
Effect of a concentrate or forage starter diet on heifer growth to two years old	V Burggraaf, A Khan, K Lowe, P Muir, B Thomson, S McCoard
Modelling nitrogen fertiliser by irrigation for southern Australian dairy farms	K Christie, R Rawnsley, R Eckard
An economic analysis of pasture production responses to winter and spring applications of gibberellic acid in the upper North Island	K McCahon, M Neal, G Doole, C Boom, J Roche
Predicting climate change impacts for dairy in New Zealand and Australia	N Sneddon et al
Impact of fodder beet and palm kernel on the fat evaluation index	N Sneddon et al