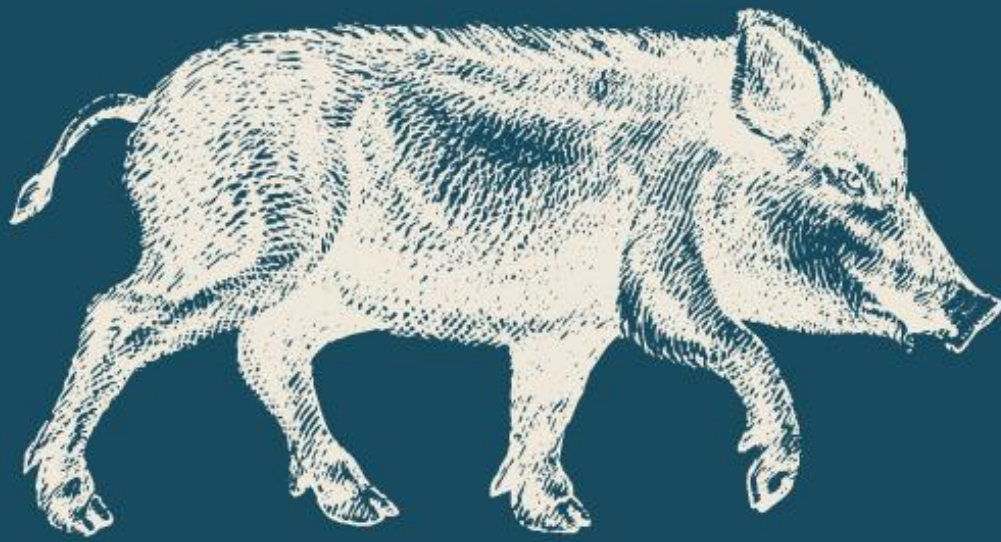




NATIONAL FERAL PIG CONFERENCE 2025

24-26 March

Mantra on View, Surfers Paradise

feralpigs.com.au/national-feral-pig-conference-2025

Getting the fundamentals right

Conference Proceedings



Day 1 - Monday 24 March

4.00-8.30pm	Registration Open
5.00-6.30pm	Opening Plenary Chair: John Gavin, Remarkable NRM, Independent Chair National Feral Pig Action Plan (NFPAP) Implementation Committee
5.00pm	Welcome to Country
5.10pm	Official Opening: The Hon Julie Collins, Minister for Agriculture, Fisheries and Forestry
5.15pm	Gold sponsor presentation: Barry Kelly, Pigbaitta
5.20pm	Jim Hone: Managing feral pig damage for production and biodiversity
6.05pm	Sheriden Morris: The pathway forward for feral pig control: Integrated pest management (IPM) and funding
6.30-8.30pm	Welcome Reception & Networking Function Sponsor: ACT Government

Day 2 - Tuesday 25 March

8.00am	Registration Open
8.30am	Welcome to Queensland: The Hon Tony Perrett, Minister for Primary Industries, Queensland
8.40am	John Gavin and Heather Channon: National Feral Pig Action Plan Update – Priorities, progress and future directions
9.15-10.15am	Session 1 - Effective regional coordination and collaboration Chair: Heather Channon, National Feral Pig Management Coordinator Program, Australian Pork Limited
9.15am	Bec Gray: Pig picture thinking: driving statewide coordination for feral pig management
9.40am	Angie Reid: Collaboration for positive outcomes in feral pig management on Indigenous lands and remote northern Australia
10.05 am	Rhiannon Ellis: The Queensland Feral Pest Initiative is contributing to the fight against feral pigs: Grants for landscape-scale, cross tenure coordination, and innovation and diversification of control tools and techniques + poster
10.10am	John Scriven: Strengthening biosecurity preparedness and protection of wetlands and biodiversity in the Darling Downs & South West Queensland by the suppression of feral pigs
10.15am	Morning Tea Sponsor: Animal Control Technologies Australia
10.45am-12.15pm	Session 2 - Effective regional coordination and collaboration (Cont.) Chair: Mark Hogno, Carpentaria Land Council Aboriginal Corporation
10.45am	Linda Vernon: A zone-based approach to feral pig management: Lessons from the Mid West demonstration site, Western Australia
11.10am	Chris Gaschk: Spatially assisted aerial shooting (SAAS) - translating feral pig habitat preferences into improved on ground outcomes
11.25am	Graeme Oats: Experience and effort is never futile: lessons learned from managing feral animal impacts in the Burdekin Shire
11.40am	Matthew Pauza: Pigs of the Roaring 40's, the unique and emerging challenges of feral pig (<i>Sus scrofa</i>) management in Tasmania
11.55am	Warddeken Land Management: Remote pig trapping and monitoring in Arnhem Land
12.10pm	Linton Staples: PIGOUT® Econobait 1080 long life feral pig bait for feral pig management
12.15pm	Lunch Sponsor: Hunter Land Management
1.00-2.25pm	Session 3 – Harnessing People Power Chair: Sam Armstrong, Agriculture Victoria
1.00pm	John Nolan: Harnessing People Power
1.25pm	Jamie Werner: Obtaining social license for feral pig management in a unique environment. Inviting Iwi (Indigenous) to the decision-making table
1.40pm	Darren Marshall: Ten years of working with Santos GNLG to control and research feral pig populations to improve landscapes scale nil-tenure control
1.55pm	David Worsley: Landholder versus Government pig control. Two case studies of feral pig control conducted by Northern Tablelands Local Land Services, NSW

2.10pm	Regional Coordination: Panel Discussion. Heather Channon, Australian Pork Limited; Sam Armstrong, Agriculture Victoria; Bec Gray, NSW Local Land Services; John Scriven, South West Regional Organization Councils; Angie Reid, North Australian Indigenous Land and Sea Management Alliance Ltd. Chair: Karen Moloney, Department of Agriculture, Fisheries and Forestry
2.45pm	Afternoon Tea Sponsor: Centre for Invasive Species Solutions
3.15–4.10pm	Session 4 - Harnessing People Power (Cont.) Chair: Matthew Gentle, Biosecurity Queensland
3.15pm	James Templeton: Bringing the sounder together: stakeholder collaboration and engagement insights from the Otways feral pig program
3.40pm	Rachel Rand: Recognised Biosecurity Groups: The importance of community engagement and supporting landholders in invasive species control
3.55pm	Tony Lockrey: Estimating economic impacts of feral pigs to grain growers
4.10pm	Land Manager: Panel Discussion. Brendan Taylor, AgForce Queensland Grains President, Dalby QLD; Tony Lockrey, Moree NSW; Dave Worsley, Nullamanna, NSW. Chair: Darren Marshall, Centre for Invasive Species Solutions
5.00pm	Break
6.30pm	Pre-dinner drinks
7.00-9.30pm	NFPC Conference Dinner Nosh Restaurant, Mantra on View Sponsor: Pigbaitta Pty Ltd

Day 3 - Wednesday 26 March

8.00am	Registration Open
8.30-10.35am	Session 5 - Risk mitigation, decision making and continuous improvement Chair: Justin Perry, North Australian Indigenous Land and Sea Management Alliance Ltd, NFPAP Scientific Advisory Panel Chair.
8.30am	Andrew Bengsen: From uncertainty to action: disease surveillance and response in feral pigs
8.55am	Troy Crittle: Do the worst first - put your pig control in order for maximum impact
9.10am	Peter Fleming: Catch per unit effort analysis of a local feral pig control program: suggestions for monitoring and continued effort
9.25am	Marietta Matasia: Indigenous-led collaboration and consistent data collection to protect marine turtles from feral pig predation in Western Cape York
9.40am	Adam Quinn: Insights on delivering integrated pig control programs in highly restricted areas, to stakeholders with differing decision drivers
9.55am	Richard Bradhurst: Development of camera trap surveillance to detect feral pigs at piggeries
10.10am	Linton Staples: HOGGONE® meSN feral pig bait controls USA wild hogs but spilled bait can pose risk to small birds in winter
10.25am	Braden Riles: Towards effective feral pig control on the Yampi Sound Training Area (Kimberley, Western Australia) + poster
10.30am	Andrew Williams: Firearms high-risk areas: perception vs reality
10.35am	Morning Tea Sponsor: INLOC
11.00am-1.00pm	Session 6 – Risk mitigation, decision making and continuous improvement (Cont.) Chair: Narelle Dybing, National Feral Pig Management Coordinator Program, Australian Pork Limited
11.00am	Brendan Cowled and Rebecca Ambrose: Pig carcass decomposition dynamics: Insights into carcass disposal for emergency animal disease management
11.25am	Joanne Walker: Applying One Health to feral pig management in Australia: challenges and opportunities
11.35am	Richard Bradhurst: Modelling the potential for spillover transmission of emergency animal disease between feral pigs and livestock
11.45am	Jens Froese: A national map and dataset of feral pig current distribution in Australia (2024)
11.55am	Tatiana Proboste: Unravelling the swine web: Decoding feral pig networks for disease prevention in Australia
12.05pm	Deane Smith: Feral pig (<i>Sus scrofa</i>) activity areas across Australia for integration into disease spread models

12.15pm	Andrew Morton: Picking the low hanging fruit, practical applications of distribution modelling and telemetry datasets
12.25pm	Peter Hamnett: Hit them so hard they can't get backup: population modelling to optimise harvest strategies for feral pig eradication on Kangaroo Island
12.35pm	Linton Staples: Adapting feral pig management technology to a potential depopulation need for domestic pigs in piggeries
12.40pm	Q&A session
1.00pm	Lunch Sponsor: Queensland Government
1.40-3.30pm	Session 7 – Keeping up with Change Chair: Andrew Bengsen, NSW Department of Primary Industries and Regional Development
1.40pm	Justin Perry and Jack Hill: Developing an ACCU Scheme method to manage feral ungulates in wetlands
2.05pm	Tarnya Cox: Achieving rapid removal and local eradication of feral pigs: methods to improve impact and exotic disease management outcomes
2.30pm	Valerie Hager: Biodiversity enhancements from controlling feral pigs, buffalo and cattle in wetlands in Australia
2.45pm	Stephen Frankenberg: Genetic biocontrol options for feral pigs
3.00pm	Matt Gentle: Exploring the use of thermal in aerial culling in north Queensland
3.15pm	Nina Scarpelli: Passive acoustic detection: a new tool in the feral pig monitoring toolbox
3.30pm	Setting future direction: Where to from here John Gavin, Remarkable NRM, Independent Chair NFPAP Implementation Committee
3.50pm	Closing comments and conference close
4.00-4.30pm	Afternoon Tea: Grab and Go Sponsor: Greyman Ops
Invitation only – Thursday 27 March	
8.30am-12.00pm	<i>For Indigenous land management groups or by invitation only, RSVP required to angie.reid@nailsma.org.au.</i> Protecting Country Against Invasive Species – Indigenous Feral Pig Workshop sponsored by NAILSMA. Peppers Soul, Surfers Paradise

Poster presentations

Brad Williams, Stacey Koprdova, and Evelyn Nicholson: Feral Pigs on Gunditjmara Country
Gunditj Mirring Traditional Owners Aboriginal Corporation, Victoria

Gavin Melgaard and Mick Freeman: Engaging with communities for feral pig control
Department of Energy, Environment and Climate Action, Victoria

We would like to thank our Sponsors and exhibitors

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Foreword from our Implementation Committee Chair

Welcome to the 2nd National Feral Pig Conference!

The theme of this year's Conference, *Getting the Fundamentals Right*, reflects the importance of strengthening the foundations of feral pig management and the attention to detail required by land managers to optimise outcomes from management effort. Through our four sub-themes, Effective Regional Coordination and Collaboration, Harnessing People Power, Risk Mitigation, Decision Making, and Continuous Improvement, and Keeping Up with Change, the critical aspects of successful management strategies will be explored.

This Conference is a culmination of the engagement and communication efforts from the National Feral Pig Action Plan (NFPAP), emphasising the need for ongoing knowledge sharing and collaboration. We aim to foster more effective and efficient solutions to reduce continuing feral pig impacts across Australia by providing a forum to bring experts and stakeholders together from all states and territories.

The program has been designed to provide ample opportunities to meet and network with like-minded individuals and organisations. This event will enable delegates to exchange ideas, learn from one another and form lasting partnerships to help improve how management programs are conducted to reduce feral pig impacts and their populations.

I encourage you to use the social functions to fully engage and connect with others, including those you may not have met before. By doing so, we hope this Conference inspires and generates new ideas, fosters partnerships and provides you with valuable insights that can be applied in your work moving forward.

A special thank you is extended to the Conference Organising Committee, which includes members of the NFPAP's Scientific Advisory Panel (SAP) and Indigenous Advisory Panel (IAP), for their dedication and hard work in making this event possible and to the Implementation Committee for their invaluable feedback and support.

I look forward to the fruitful discussions, innovative ideas and the overall success of the Conference.

I wish you an enjoyable Conference and hope you find it inspiring!

Best wishes,

John Gavin

Implementation Committee		Conference Organising Committee	
John Gavin	Remarkable NRM (Chair, IC)	Dr. Justin Perry	North Australian Land and Sea Management Alliance (SAP Chair)
Dr Justin Perry	North Australian Land and Sea Management Alliance (SAP Chair)	Dr. Peter Adams	WA Department of Primary Industries and Regional Development (SAP)
Mark Hogno	Carpentaria Land Council Aboriginal Corporation (IAP Chair)	Dr. Andrew Bengsen	NSW Department of Primary Industries and Regional Development (SAP)
Margo Andrae	Australian Pork Limited	Dr. Jens Froese	CSIRO (SAP)
Romy Carey	Northern Territory Cattlemen's Association	Dr. Matthew Gentle	Department of Agriculture and Fisheries QLD (SAP)
Richard Evison	Westpork	Jenny Lawler	KAM Events
Quentin Hart	NSW Department of Primary Industries and Regional Development	Darren Marshall	Centre for Invasive Species Solutions (IC, SAP)
Daniel Lewer	Hunter Land Management	Kate Murphy	KAM Events
Darren Marshall	Centre for Invasive Species Solutions	Jamie Petrie	Gladstone Water Board
Karen Moloney	Department of Agriculture, Fisheries and Forestry	Preethi Prayaga	Burdekin Shire Council
Dave Worsley	Land manager representative, NSW	Bradley Power	Animal Control Technologies (Australia)
Dr. Heather Channon	National Feral Pig Management Co-ordinator	Dr Angie Reid	North Australian Land and Sea Management Alliance (IAP)
Dr. Narelle Dybing	National Feral Pig Program Support Officer	Dr. Heather Channon	National Feral Pig Management Coordinator
		Dr. Narelle Dybing	National Feral Pig Program Support Officer

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Contents

Opening Plenary Presentation – Jim Hone	Page 1
Opening Presentation	Page 2
Session 1: Effective regional coordination and collaboration (Chair Heather Channon)	Page 3
Session 2: Effective regional coordination and collaboration (Chair Mark Hogno)	Page 8
Session 3: Harnessing People Power (Chair Sam Armstrong)	Page 14
Session 4: Harnessing People Power (Chair Matt Gentle)	Page 19
Session 5: Risk mitigation, decision making and continuous improvement (Chair Justin Perry)	Page 23
Session 6: Risk mitigation, decision making and continuous improvement (Chair Narelle Dybing)	Page 32
Session 7: Keeping up with Change (Chair Andrew Bengsen)	Page 40
Poster presentations	Page 47
Notes	Page 49

Oral Presentation

11.55am Wednesday 26 March 2025

Unravelling the swine web: decoding feral pig networks for disease prevention in Australia

Tatiana Proboste¹, Abigail Turnlund¹, Andrew Bengsen², Matthew Gentle³, Cameron Wilson³, Lana Harriott³, Darren Marshall⁴, Richard Fuller⁵, Ricardo Soares Magalhães¹

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Abstract

Feral pigs pose a significant threat to wildlife and inflict substantial economic damage to Australian agriculture. They also serve as potential hosts for numerous infectious diseases, including foot-and-mouth disease (FMD), swine vesicular disease, Aujeszky's disease, African swine fever (ASF), and classical swine fever, all which are exotic to Australia.

National preparedness for the incursion of these diseases hinges on the development and validation of disease transmission models. Estimating contact rates between individual animals is crucial to support valid transmission models. However, current models rely on contact rates from feral pig populations outside Australia, which may not adequately represent within and between Australian feral pig social units (sounders).

This study aims to fill this gap by quantifying interactions within and between feral pig sounders in Queensland and New South Wales. We utilized GPS-tracking data from feral pigs and employed network analysis to estimate direct and indirect contact rates for each year, season, and pig population. Our datasets were fitted to a continuous-time movement model (CTMM) to infer trajectories at a finer scale (five-minute intervals). We also examined the impact of varying distance thresholds on determining direct or indirect contact and explored factors that may influence contact rates, such as sex, season, and location.

Our analysis of 139,940 location fixes from 146 animals tracked from 2017 to 2023 revealed that the majority of direct (96%) and indirect (69%) contacts occurred within the same sounder. Indirect contacts within and between sounders were most prevalent during winter and less in summer. The sex of the dyad significantly influenced the contact rate. Our results provide locally relevant estimates of contact rates to support disease modelling. Importantly, our findings also underscore the importance of considering demographic and seasonal variations when estimating contact rates, given they will significantly affect contact rates and likely the dynamics of disease transmission.

Biography

Dr. Tatiana Proboste is a Research Fellow at the Spatial Epidemiology Lab (UQ), specialising in zoonotic disease transmission and spatiotemporal analysis. Her work utilises spatial models and network analysis techniques to enhance our understanding of disease transmission dynamics, particularly within wildlife populations and at the wildlife-human interface. Dr. Proboste has been involved in projects ranging from the molecular detection of tick-borne pathogens to the development of tools for exploring wildlife's role in disease transmission. Recent years have seen her focus on investigating mosquito-borne disease outbreaks, identifying Q fever clusters in Queensland and associated risk factors, and applying network analysis to estimate contact rates in feral pig populations in eastern Australia. In addition to her research, Dr. Proboste is a casual lecturer at the School of Veterinary Science. She is also part of the Centre for Biodiversity and Conservation Science, Q fever Interest Group and the HEAL Network.

We would like to thank all our attendees (both in-person and virtual).

We hope to see you at a future National Feral Pig Conference!