

Conference Programme: Is New Zealand Ecology on solid foundations?

MONDAY MORNING

07:30 Stewart Foyer: REGISTRATION DESK OPEN

Stewart 1 (S1): Conference Opening

08:30 Welcome

Keynote Address

08:50 Richard Hobbs University of Western Australia
What restoration can and can't do: opportunities and constraints in a rapidly changing world
Sponsored by Faculty of Agriculture and Life Sciences, Lincoln University

Plenary Speaker

09:40 Trevor Worthy University of Adelaide
A palaeontological perspective on the assembly of the terrestrial vertebrate biota of New Zealand and implications in understanding the ecology of the extant biota
Sponsored by Faculty of Agriculture and Life Sciences, Lincoln University

10:20 – 10:50 Stewart Foyer : MORNING TEA

Stewart 1 (S1): Symposium: Restoration Ecology - Session Chair: Nick Dickinson

10:50 Jill Rapson Massey University
Is restoration succeeding? Testing against the criteria of the SER primer
11:10 Mike Bowie Lincoln University
Indicators of restoration success in a sand plain forest
11:30 Olivia Burge* University of Canterbury
Restoring a RAMSAR wetland – by reforesting it?
11:50 Robert Schadewinkel* University of Otago
Does age matter? Dispersal and settlement patterns of a forest passerine reintroduced to a mainland fenced sanctuary
12:10 Tessa Roberts* Massey University
Comparison of nurse plant species' effectiveness in the grasslands of Molesworth Station, Marlborough, New Zealand

Stewart 2 (S2): Contributed Papers - Session Chair: Laura Young

10:50 Dave Kelly University of Canterbury
Seed trapping, plant synchrony, and dispersal service in New Zealand forests
11:10 Laura Young* University of Canterbury
Evaluating seed disperser effects on establishment of montane and subalpine fleshy-fruited plants
11:30 K.C. Burns Victoria University of Wellington
What causes size coupling in fruit-frugivore interaction webs?
11:50 Debra Wotton Landcare Research
Seed dispersal of fleshy-fruited environmental weeds in NZ: a review
12:10 Tarryn Wyman* University of Canterbury
Possums and seed dispersal: a lazy, inefficient Australian at work

Commerce 1 (C1): Contributed Papers - Session Chair: Sam Brown

10:50 Marie-Caroline Lefort* Lincoln University
Does the ability to break through host defences contribute to the invasion success of the New Zealand grass grub *Costelytra zealandica*?
11:10 John Marris Lincoln University
Islands in the snow: Ecology, systematics and biogeography of the New Zealand beetle genus *Protodendrophagus* (Coleoptera: Silvanidae: Brontini)
11:30 Jamie Stavert* University of Auckland
Making the best of a crappy situation: food preference, selection and feeding behaviour in native New Zealand dung beetles
11:50 Dan Barrett* University of Otago
Multiple-scale resource selection of an urban peripatus (Onychophora: Peripatopsidae)
12:10 Nathan Camp* University of Auckland
Food and Sex: Strategic signal hierarchies in *D. melanogaster* and *D. simulans*

Commerce 2 (C2): Symposium: Wildlife Management and Conservation - Session Chair: Rob Cruickshank

10:50 Nicolas Dussex* University of Otago
Unexpected genetic population structure in the kea (*Nestor notabilis*)
11:10 Diana Prada Landcare Research
Kiwi, Dogs, and DNA: The pathway to prosecution
11:30 Kerry Weston* University of Otago
Rock wren (*Xenicus gilviventris*): Population structure in an alpine archipelago
11:50 C.M. King University of Waikato
Multiple paternity and differential male breeding success in ship rats
12:10 Cheeho Wong Massey University
Does Island size affect genetic diversity of native lizards?

12:30 – 13:15 Stewart Foyer: LUNCH

* Indicates student presentation

MONDAY AFTERNOON

Stewart 1 (S1): Plenary Speaker

13:15	Kerry-Jayne Wilson	Is New Zealand's understanding of seabird ecology on solid foundations? <i>Sponsored by Faculty of Agriculture and Life Sciences, Lincoln University</i>
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Stewart 1 (S1): Symposium: Restoration Ecology - Session Chair: Stephane Boyer

14:00	Stephen Hartley	Victoria University of Wellington	Managing competition, disturbance and stress to achieve optimal tree survival – a cost-benefit analysis of management techniques for recreating a swamp forest
14:20	Emily Weiser*	University of Otago	Population viability of highly inbred black robins
14:40	Yanbin Deng	Waikato Regional Council	A refined methodology for prioritising Significant Natural Areas in the Waikato region
15:00 – 15:30 Stewart Foyer: AFTERNOON TEA			
15:30	Philippa Crisp	Greater Wellington Regional Council	Wairarapa Moana – Challenges and opportunities
15:50	B. Osborne	Auckland Council	Understanding Auckland's Ecosystems
16:10	Annette Evans*	University of Auckland	Scale insects as keystone species: the importance of honeydew to endemic gecko populations in a recovering island ecosystem
16:30	Simon Moore	Department of Conservation	Project Janszoon - Ecological Restoration of Abel Tasman National Park

Stewart 2 (S2): Contributed Papers - Session Chair: Michael Rostas

14:00	Georgia Cummings*	University of Auckland	The role of Short-tailed bats (<i>Mystacina tuberculata</i>) in the Pollination of <i>Dactyloctenium aegyptium</i> in Pureora Forest
14:20	Michael Rostas	Lincoln University	Sequestered plant volatiles protect gall aphids against large herbivores – Support for the Enemy Hypothesis
14:40	Mads Thomsen	University of Canterbury	'A friend of my friend is my friend' – the importance of facilitation cascades in maintaining biodiversity
15:00 – 15:30 Stewart Foyer: AFTERNOON TEA			
Contributed Papers - Session Chair: Michael Rostas			
15:30	Carol Frost*	University of Canterbury	Reverse spillover of predators from managed to natural habitats
15:50	Guadalupe Peralta*	University of Canterbury	Food web structure and community composition across a habitat edge between natural and production forest
16:10	Simon Litchwark*	University of Canterbury	Impact of Honeybee Declines on Pollinator Community Structure and Network Interactions
16:30	Francis Burdon*	University of Canterbury	Sediment pollution reduces niche space in agricultural stream food webs through altered carbon resource availability

Commerce 1 (C1): Contributed Papers - Session Chair: Jon Sullivan

14:00	Benjamin Myles*	Alan Wilson Centre	Community assembly and phylogenetic structure of age stratified tree communities on Hauturu (Little Barrier Island)
14:20	Fiona Thomson	Landcare Research	Extending a quantitative classification to include New Zealand's non-woody plant communities
14:40	Robert Holdaway	Landcare Research	Quantifying uncertainty in forest inventory plot data
15:00 – 15:30 Stewart Foyer: AFTERNOON TEA			
Contributed Papers - Session Chair: Hannah Buckley			
15:30	Hannah Buckley	Lincoln University	Invertebrate communities of New Zealand sand dunes
15:50	Dhobasheni Newman*	University of Auckland	Ecology of New Zealand Seaweed flies
16:10	Adrian Paterson	Lincoln University	LDD – OTT, LOL or BFF? Long distance dispersal and the New Zealand biota
16:30	Esther Dale*	University of Auckland	The influence of seabirds on Cooks scurvy grass (<i>Lepidium oleraceum</i> s.s.), a threatened coastal cress

Commerce 2 (C2): Symposium: Wildlife Management and Conservation - Session Chair: Des Smith

14:00	Adrian Monks	Landcare Research	Auditing Noah's Ark: properties of a PD-based threatened species prioritisation scheme
14:20	Alan Mark	University of Otago	Exotic conifers in the South Island high country: asset, liability or chaotic?
14:40	Christine Sheppard*	University of Auckland	Predicting weeds in a changing climate: are bioclimatic models validated by field trials?
15:00 – 15:30 Stewart Foyer : AFTERNOON TEA			
15:30	Joanne Hoare	Department of Conservation	Advances in tools for reptile population monitoring in New Zealand
15:50	Kosuke Takaya*	Hokkaido University	High rate of incidental capture of native mammals and birds in introduced raccoon traps in Hokkaido, Japan
16:10	Jenny Laycock*	Massey University	Amphibian Pet Trade in New Zealand
16:30	Isabel Castro	Massey University	Fate over time of two populations of the endangered <i>Powelliphanta traversi tararuaensis</i> at two remaining strongholds.

17:30 WINE AND CHEESE POSTER SESSION (Stewart Foyer)

TUESDAY MORNING

08:00 Stewart Foyer : REGISTRATION DESK OPEN

Stewart 1 (S1)

08:55 Welcome and notices

Plenary Speaker

09:00 Bastow Wilson University of Otago Does ecology have any theories, and if so do they work?
Sponsored by The Royal Society of New Zealand

Plenary Speaker

09:40 Hamish Campbell GNS Science Geological perspectives for permanent land during the Zealandia-New Zealand transition
Sponsored by Selwyn District Council

10:20 – 10:50 Stewart Foyer : MORNING TEA

Stewart 1 (S1): Symposium: Drylands Research - Session Chair: James Reardon

10:50 S. Walker Landcare Research Effects of secondary succession from grassland to shrubland on flora and fauna in a New Zealand dryland landscape

11:10 D.J. Wilson Landcare Research Species richness and population density of native and exotic birds on successional dryland gradients from grassland to shrubland

11:30 Adrian Monks Landcare Research Lessons for low intensity woody restoration in drylands: limitations to seedling establishment

11:50 E. Cieraad Landcare Research Effects of soil moisture and N on the distribution of N-fixing species in drylands

12:10 Larry Burrows Landcare Research Can native trees and shrubs establish in dryland scotch broom stands?

Stewart 2 (S2): Symposium: Next Generation Sequencing - Session Chair: Adrian Paterson

10:50 Mike Taylor University of Auckland Little friends: exploring the microbial ecology of New Zealand's endemic fauna

11:10 Laura Martinez-Garcia Landcare Research Arbuscular mycorrhizal-plant interactions across Franz Josef chronosequence

11:30 Mahajabeen Padamsee Landcare Research A metagenomic study of fungi in kauri forests and the impact of kauri dieback

11:50 Stephane Boyer Lincoln University From waste material to biodiversity capsules, how recent advances in molecular ecology raises the profile of generalist predators' faeces

12:10 Emily Fountain* Lincoln University The trials and tribulations of next-generation sequencing with non-model organisms

Commerce 1 (C1): Contributed Papers - Session Chair: Laura Molles

10:50 Kevin Parker Massey University The effects of translocation-induced isolation and fragmentation on the cultural evolution of bird song

11:10 Brent Barrett Lincoln University Addressing the problem to kea posed by brushtail possums

11:30 A.L. Wilson* Massey University Survival and Habitat use of brown kiwi chicks (*Apteryx mantelli*) in a high density, reduced predator population

11:50 Andrew Gormley Landcare Research Recent application of multi-species analysis of bird communities: (1) Assessing kiwifruit orchard management and (2) biodiversity monitoring on public conservation land

12:10 Sarah Wells* Massey University Love thy neighbour: mating systems and cuckoldry in the tui (*Prosthemadera novaeseelandiae*)

Commerce 2 (C2): Contributed Papers - Session Chair: Melinda Rixon

10:50 Melinda Rixon Auckland Council Protecting significant ecological areas in Auckland

11:10 A. Zakharova Landcare Research Soil carbon dynamics: Quantifying labile soil carbon pools

11:30 Geoff Walls Riding the rapids: an eco-ethical journey down the Mokihinui

11:50 Jonathan Boow Auckland Council Auckland Council's Biodiversity Strategy – Initial implementation

12:10 John Sawyer New Zealand Plant Conservation Network A network approach to implementing the Global Strategy for Plant Conservation

12:30 – 13:15 Stewart Foyer : LUNCH

TUESDAY AFTERNOON

Stewart 1 (S1): Plenary Speaker

13:15	Grant Norbury	Landcare Research	Dryland habitat modification and succession: implications for pest ecology, impacts and damage mitigation <i>Sponsored by Landcare Research</i>
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Stewart 1 (S1): Symposium: Drylands Research - Session Chair: Susan Walker/Larry Burrows

14:00	Emily Weeks	Landcare Research	The value of validated estimates of vulnerability for effective conservation planning under dynamic threats
14:20	Philip Seddon	University of Otago	Matrix matters: Differences of grand skink metapopulation dynamics in native tussock grasslands and exotic pasture grasslands
14:40	C. Rouco	Landcare Research	Annual hunting event reveals rabbit recovery 14 years after introduction of rabbit haemorrhagic disease in southern New Zealand
15:00 – 15:30 Stewart Foyer : AFTERNOON TEA			
15:30	Ella Hayman	Landcare Research	Does foliage of <i>Thymus vulgaris</i> (Lamiaceae) inhibit the germination of native shrubs and grasses?
15:50	Mark Saunders	Sanders Consulting Ltd	Differential responses to large-scale predator control and river flows by four braided river bird species
16:10	Christopher Jones	Landcare Research	Impacts of introduced European hedgehogs on endemic skinks and wētā in tussock grassland
16:30	C. Rouco	Landcare Research	One introduced species helping another: dispersal of a rose seed infesting wasp by possums in a dryland ecosystem

Stewart 2 (S2): Symposium: Community-led Projects - Session Chair: Jo Whitehead

14:00	Lionel Solly	Department of Conservation	Working with others to grow conservation – changes at DOC
14:20	John Sawyer	Auckland Council	“Nature everything” – the future of community driven conservation
14:40	Jo Whitehead	Restoration SolutioNZ for Nature	Kids Restore the Kepler – an inspiring example of community collaboration for conservation in Fiordland
15:00 – 15:30 Stewart Foyer : AFTERNOON TEA			
15:30	Will Allen	Lincoln University	Focusing on outcomes: How to support shared understanding and better integration across multiple science disciplines and stakeholder perspectives?
15:50	Chris Ferkins	Auckland Council	North-West Wildlink – engaging through community led development to deliver biodiversity enhancement
16:10	Shaun Ogilvie	Lincoln University	Applied Ecology and Mataranga Maori: naturally coupled in the natural world?
16:30	G. Norbury	Central Otago Ecological Trust	Outcomes of an Otago skink translocation: should the sanctuary movement fret about mice?

Commerce 1 (C1): Contributed Papers - Session Chair: Laura Molles

14:00	M. Highway	Waikato Regional Council	Hamilton Halo
14:20	Chris Bycroft	Wildland Consultants Ltd	Bird monitoring before, during, and after the construction of a diversion wall structure at Ohau Channel, Lake Rotoiti, Rotorua
14:40	Josie Galbraith*	University of Auckland	Bird feeding in urban environments: quantifying the effects of a common human activity
15:00 – 15:30 Stewart Foyer : AFTERNOON TEA			
15:30	Zoë Stone*	University of Auckland	Plant Phenology of Hauturu: resource availability and kakapo reproduction
15:50	Sandra Anderson	University of Auckland	Bird pollination and dispersal services to plants: interactions, losses, and trophic cascades
16:10	Des Smith	Lincoln University	A novel data-logger egg for the adaptive management of avian conservation breeding programmes
16:30	Jessica Hiscox*	Massey University	Are microbes contributing to the decline of our national icon, the kiwi?

Commerce 2 (C2): Contributed Papers - Session Chair: Helen Blackie

14:00	J.W.B. MacKay	University of Auckland	The Possum Spitfire – a long-life tool for possum control
14:20	Shaun Ogilvie	Lincoln University	Distribution and concentration of the phytotoxin tutin in tutu (<i>Coriaria arborea</i>) – implications for use as a vertebrate pesticide
14:40	Karolina Petrovic*	Charles Sturt University	A world on a plate: What do possums eat when they are overseas?
15:00 – 15:30 Stewart Foyer : AFTERNOON TEA			
Contributed Papers - Session Chair: James Ross			
15:30	Jack Lee*	Lincoln University	Both species sorting and neutral processes drive assembly of bacterial communities in aquatic microcosms
15:50	G.N. Bramley	Mitchell Partnerships	The costs and benefits of trapping to reduce the number of introduced mammals in Puketi Forest, Northland
16:10	Shona Sam	Lincoln University	Non-target interference of possum control devices affecting the success of possum maintenance control
16:30	Colin Meurk	Landcare Research	Landscape Theory to Applied Landscape Design in a New Zealand context

19:30 **Recreation Hall, Lincoln University: CONFERENCE DINNER**

WEDNESDAY MORNING

08:00 Stewart Foyer : REGISTRATION DESK OPEN

Stewart 1 (S1)

09:35 Welcome and notices

Plenary Speaker

09:40 John Leathwick Department of Conservation Integrated prioritisation of the management of New Zealand's ecosystems and threatened species
Sponsored by the Department of Conservation

10:20 – 10:50 Stewart Foyer : MORNING TEA

Stewart 1 (S1): Symposium: Wildlife Management and Conservation - Session Chair: James Ross

10:50 Des Smith Lincoln University Modelling spatial data to optimize control of invasive vertebrates
11:10 Mandy Barron Landcare Research Pest control across borders
11:30 Helen Blackie Lincoln University Who, where and when: A new era in species recognition and animal monitoring tools
11:50 Cheryl Krull* University of Auckland Feral pigs in a temperate rainforest ecosystem: ecological impacts and management
12:10 Andrew Gormley University of Otago First evidence that marine protected areas can work for marine mammals: Hector's dolphins and the Banks Peninsula Marine Mammal Sanctuary

Commerce 1 (C1): Symposium: Microbial Ecology - Session Chair: Gavin Lear

10:50 Gavin Lear Lincoln University The biogeography of stream bacteria
11:10 Paulina Giraldo-Perez* University of Auckland The impact of a selfish gene on the ecology of yeast
11:30 Julia Bellamy* Lincoln University Spatial variation in bacterial community composition, diversity and function in shallow alpine tarns
11:50 Claudia Buser University of Auckland DIY ecosystems: Can ecosystem engineering drive the evolution of mutualisms?
12:10 Tony Lough New Zealand Genomics NZGL: Genomics working in New Zealand

Commerce 2 (C2): Symposium: Plant Functional Traits - Session Chair: Tim Curran

10:50 C.H. Lusk University of Waikato The whole-plant compensation point as a measure of tree species shade tolerance
11:10 George Perry University of Auckland Exploring the coexistence of tree species with different gap-making and gap-requiring strategies: a spatial simulation approach
11:30 Matt McGlone Landcare Research Ghosts in the Grasslands: evolution of leaf abscission in New Zealand grasses
11:50 Megan Van Etten Massey University Is phenotypic plasticity a blessing or a curse? How global warming may affect a North American alpine plant
12:10 Tim Curran Lincoln University Trait shifts across rainfall contrasts in tropical and subtropical rainforests indicate plant adaptations to drought

12:30 – 13:15 Stewart Foyer : LUNCH

WEDNESDAY AFTERNOON

Stewart 1 (S1): Plenary Speaker

13:15	John Parkes	Landcare Research	Pushing the boundaries of pest eradication <i>Sponsored by Landcare Research</i>
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Stewart 1 (S1): Symposium: Wildlife Management and Conservation - Session Chair: James Ross

14:00	Idan Shapira*	Massey University	Conspecific attractiveness in invasive Norway rats can facilitate pest control
14:20	Belinda Whyte*	Lincoln University	Changes in possum spatial ecology following density reduction: implications for conservation and bovine tuberculosis management
14:40	Georgina Pickerell*	University of Otago	How to catch a cat: a comparison of methods for detecting mammalian predator presence on New Zealand braided rivers

15:00 – 15:30 Stewart Foyer : AFTERNOON TEA

15:30	Colin O'Donnell	Department of Conservation	Long-term persistence of bat-colony social structure: implications for conservation of threatened species
15:50	Dean Anderson	Landcare Research	On theory and applied ecological research: stoat (<i>Mustela erminea</i>) eradication from Resolution Island, Fiordland, New Zealand
16:10	Janine Duckworth	Landcare Research	Kapiti Island Stoat Incursion: A case study applying new technologies to understand the biology of the invasion and to improve trapping and surveillance outcomes
16:30	Isabel Castro	Massey University	Use of adhesives to attach devices to invertebrates: implications for depredation by ship rats (<i>Rattus rattus</i>)

Commerce 1 (C1): Symposium: Microbial Ecology - Session Chair: Gavin Lear

14:00	Nina Koele	Landcare Research	Mycorrhizal fungi show no preference for different mineral phosphorus substrates incubated in NZ soils
14:20	Suzanne Orchard*	University of Western Australia	Small scale spatial variation in soil properties determines colonisation by arbuscular mycorrhizal fungi
14:40	Karen Adair	Lincoln University	Assessing the impact of land management practices on bacterial community structure in New Zealand soils

15:00 – 15:30 Stewart Foyer : AFTERNOON TEA

Symposium: Bio-Data Archiving and Bio-Monitoring - Session Chair: Jon Sullivan

15:30	Jon Sullivan	Lincoln University	Extending New Zealand's natural history foundations with NatureWatch NZ (http://naturewatch.org.nz)
15:50	Hamish Maule	Landcare Research	Archiving vegetation plot data: the NVS experience
16:10	Stephen Reay	Auckland University of Technology	Exploring Art + Design as a means to engage urban people with ecology
16:30	David Scott		Utilization of archived vegetation and environmental monitoring data

Commerce 2 (C2): Contributed Papers - Session Chair: Tim Curran

14:00	Angelina Smith*	Massey University	Vehicle damage to endemic plants on the Rangipo Desert, Tongariro National Park, New Zealand
14:20	Chloe MacLaren*	Lincoln University	The role of remnant forest vegetation in the conservation of biodiversity and ecosystem services in highland pastures of Ecuador
14:40	Gretchen Brownstein	University of Otago	Turf wars: drivers and dynamics controlling a two-phase coastal ecosystem

15:00 – 15:30 Stewart Foyer : AFTERNOON TEA

Contributed Papers - Session Chair: Bruce Burns

15:30	Bruce Burns	University of Auckland	Auckland's green volcanic heart: vegetation of the Auckland volcanic cone reserve network
15:50	P. Wehi	Massey University	Co-existence in two species of tree weta
16:10	Kate McAlpine	Department of Conservation	Managing ground cover weeds for biodiversity gain in New Zealand lowland forests
16:30	Andrew Barrell		Forest Canopy – The Final Frontier?

Stewart 1 (S1): Conference Closing

17:00	Prize giving and farewell
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THURSDAY MORNING

Lincoln University Gate 1: Field trips

08:00	Field trip departure (packed lunch provided)
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