

# Unitec Research Committee (URC) Agenda

14 March 2019 - 1pm to 3pm

## 1. WELCOME & APOLOGIES

Apologies

Absent

## 2. Confirmation of the minutes of the 8 November 2018 and 14 February 2019 meeting [pg3](#)

The URC minutes from the meetings held on 8 November 2018 and 14 February 2019 to be ratified by the committee.

Moved:

Seconded:

## 3. Matters arising from the previous minutes [pg9](#)

Agenda Item	Matter Arising from 8 November	Responsible	Outcome
4	Revisit scope for a Research Symposium working group early in 2019.	Kristie Cameron	Rolled over to next meeting
8	Present the Research Time Allocation report to Leadership team early 2019.	Marcus Williams	Rolled over to action in March/April
Agenda Item	Matter Arising from 14 February	Responsible	Outcome
4	Setup meetings for 2019 and send draft schedule to the Chair for approval.	Asma Munir	Completed
5	Circulate a draft memo to the committee members who attended meeting on 14 February.	Marcus Williams	Completed
	Make changes in the Terms of Reference.	Asma Munir	Completed

## 4. Consultation and co-creation process for the new research strategy – 2020 - 2025

Marcus Williams to facilitate discussion.

5. **2019 Work plan** [pg10](#)  
Marcus Williams to facilitate discussion.
6. **Proposal for process to advise on contentious ROMS entries** [pg11](#)  
Refer to attached memo
7. **Unitec Research Fellow Nominee** [pg12](#)  
Refer to attached memo and CV for Dr Linton Winder.
8. **PBRF assessment feedback**  
Oral presentation from Associate Professor Jonathan Leaver.
9. **General Business**



# Minutes

## Unitec Research Committee (URC)

---

08 November 2018, 2.00 to 4.00 pm  
55-1004 Penman House  
Unitec Mt Albert Campus

---

### Membership of the Unitec Research Committee (Quorum = 7)

Assoc Prof Marcus Williams	Chair, Unitec Research Committee
Jo Mane	Maori Representative
Falaniko Tominiko	Pasifika Representative
Rowena Fuluifaga	Manager - Learning & Achievement
Heather Stonyer	GM – Industry and Workplace Development
Myles Durrant	Postgraduate Student Representative
Kristie Cameron	Early Career Researcher Forum Representative
Ray Jauny	Health and Community Network Member
Roger Birchmore	Construction and Infrastructure Network Member
Nick Kearns	Business & Enterprise Network Member
Christian Probst	Director, High Technology Transdisciplinary Research
Yusef Patel	Construction and Infrastructure Network Member
Gwynneth Porter	ePress Editor (non-voting member)

### In attendance

Emma Skellern	URC Secretary
Linda Kestle	Proxy for Roger Birchmore

### Unitec Research Committee Terms of Reference

The powers and functions of the Unitec Research Committee (URC) shall be to:

- (a) Foster the conduct of research, and support the achievement of Unitec's strategic research, enterprise and innovation priorities;
- (b) Propose and advise on strategic directions and priorities for research, enterprise and innovation;
- (c) Provide expert advice on institutional policy;
- (d) Develop protocols and guidelines and make recommendations in relation to the

- conduct of research, enterprise and innovation;
- (e) Oversight of internal contestable funding and the reporting of funded projects;
- (f) Encourage and enhance the development of the research, enterprise and innovation culture along with student and staff research capability;
- (g) Oversee the monitoring of research outputs and research reporting; and,
- (h) Foster transdisciplinary, collaborative and externally engaged research, enterprise and innovation.

# 1. WELCOME & APOLOGIES

## **Apologies**

Rowena Fuluifaga  
Roger Birchmore

## **Absent**

Heather Stonyer  
Nick Kearns

# 2. CONFIRMATION OF THE MINUTES OF THE 10<sup>th</sup> SEPTEMBER 2018 MEETING

The URC minutes from the meeting held on 10<sup>th</sup> of September to be ratified by the committee.

NOTE: The October URC meeting was cancelled given EER preparation meeting clash.

**Moved:** Falaniko Tominiko

**Seconded:** Christian Probst

# 3. MATTERS ARISING FROM THE PREVIOUS MINUTES

Agenda Item	Matter Arising	Responsible	Outcome
	The URC Chair will present a memo with this proposed change to the RPTL terms of reference to the Academic Board.	Marcus Williams	Complete
5	Marcus to implement the new definition for Industry Based Research through the Tuapapa Rangahau Team.	Marcus Williams	Complete

**ACTION – Initiate a project in 2019 to assess the extent of NVivo use, in order to make an informed decision regarding whether the subscription should be renewed. Marcus Williams.**

## **4. Scope for generating research outputs from the Unitec Research Symposium**

It can be challenging to encourage staff to participate in the annual research symposium, as presentations are not recognised as research outputs eligible to be entered in Unitec’s Research Output Management system.

Currently the Symposium is focused on developing and supporting Unitec’s research culture, and presentations are noted as Contributions to the Research Environments which can be included in a PBRF portfolio. Tūāpapa Rangahau does not have the resource available to extend the event’s scope to be peer reviewed, instead this would require a working party to undertake the additional work and planning.

The following possibilities to scale up the symposium in order to generate recognised research outputs were discussed:

1. Focus on a specific theme and invite people from organisations and institutions engaged in that field, as well as ensure a robust peer review process is in place for considering applications.
2. Publish the conference proceedings in ePress.

There was some interest from the Committee to establish a working group to pursue these options.

**ACTION: Kristie Cameron to revisit scope for a Research Symposium working group early in 2019.**

## **5. Unitec Research Fellow**

Nilufar Baghaei's Research Fellow application was unanimously supported by the URC members. Her extensive CV and impressive research background was noted.

## **6. Updated RPTL Terms of Reference**

James Stewart and Maryam Mirzaei, Pathway Research Leaders in Business Practice, requested a change to the terms of reference for the RPTL to allow other forms of research output verification for part time staff, or those on limited term contracts, who work at another institution and may not wish to record their research outputs in Unitec's research data base (ROMS) due to obligations to report research exclusively with their primary employer institute.

This request was supported by the URC members, with the caveat that careful scrutiny be given to which employment contracts/situations this exception would apply to. It is important not to create a loop hole for Unitec staff, who need to update ROMS with all new research to ensure inclusion in Unitec's research reporting and eligibility for internal funding and research support services.

**ACTION: Identify the specific employment context where this exception would occur for the RPTL Terms of Reference and present the proposed change to the Academic Board, in preparation for the 2019 RPTL. Marcus Williams and Emma Skellern.**

## **7. ECR and SRF Internally Funded 2018 projects progress update**

URC members reviewed the progress reports, supporting most recommendations. The change in project plans and request to reallocate budget noted in two cases; Victor Grbic's project, *Te Rua Digital Repository*, and Aziz Ahmad/Guillermo Ramirez-Prado's project, *Towards 'Implementation of model predictive control for domestic hot water tank'*.

For these requests to be granted, revised project plans and budgets with new costings will need to be submitted to the URC for consideration. Given the time constraints, URC members agreed to assess these new requests between meetings. It is acknowledged that given it is now mid-November there may be insufficient time for these project revisions to eventuate.

**ACTION: Research Network Partners to work with researchers on these revised project plans and budgets.**

## **8. 2019 Research Planning Cycle and Research Time Allocation**

Marcus Williams presented the proposed model for the 2019 Research Planning and Research Time Allocation process, which builds on the work that was put in place to inform the 2018 research allocation process.

This process enables a more equitable, data driven approach to research time allocation which will be led by Tūāpapa Rangahau and delivered in partnership with the new Schools. Allocations will be based on staff research productivity enabling a more consistent and transparent approach across the institute.

This approach also enables research time to be allocated to staff on technical or sub-degree level who are current and productive researchers.

URC members queried the timing for this new process given the large scale change underway and the uncertainty regarding the new academic structure and positions. They also wondered how the partnership approach would work given the sustainability of the Pathway Research Leader role was uncertain. Scope for opening this research allocation up to other non-teaching business units was discussed.

Conversation also focused around challenges regarding being able to use allocated research time. For some pathways this was particularly problematic given other role requirements and high teaching workloads. These issues have been documented in a report on research time, developed in partnership with the pathway research leaders, and it was agreed this report and issue should be tabled with Academic Board in early 2019.

Members requested more time to consider the model and seek input from colleagues. It was also requested that the FTE model and research allocation rules be outlined in more detail. The model will need to be presented to the December Academic Board (occurring on the 4<sup>th</sup> of December), therefore further URC feedback was requested by the 19<sup>th</sup> of November.

**ACTION: Updated FTE explanation and related Research Time Allocation model documents to be distributed to URC members, for feedback by the 19<sup>th</sup> of November in order to present at the December Academic Board. Marcus Williams.**

**ACTION: Marcus Williams to present the Research Time Allocation report to the Academic Board in early 2019.**

## **9. Utilisation of External Research and Enterprise funding at Unitec**

Marcus Williams presented the new process and guidelines for internal management of external funding, which outlines how this funding will be utilised and indirect project costs allocated. Currently each project has been managed on a case by case basis. This process will support a more systematic approach to research contract management and increase profitability for Unitec and has been unanimously supported by the Senior Academic Leadership Team.

**ACTION: Feedback on the new utilisation and internal management of external funding guideline documentation to be received by URC members by the 19<sup>th</sup> of November, in order to then present at the December Academic Board. Marcus Williams.**

## **10. General Business**

Concerns were raised about the reduced Research Dissemination budget for 2018, and whether the situation would improve for 2019. While staff are encouraged to publish there is a long turnaround time, to ensure research productivity performance for degree programmes presentation of research at conferences remains important. The Director Research and Enterprise is advocating for sufficient Research Dissemination budget in 2019. While the aim is to ensure a larger amount than what the 2018 budget was reduced to during the cuts in May, it is likely to be less than what was available at the beginning of 2018. In 2019 Tuapapa Rangahau will also be focusing attention on the additional two research goals; industry funded projects and external research income.

Concerns about the Research Leader roles moving forward were also raised. These roles have been critical in ensuring the operation of the partnership model across the last two years. It is noted that currently this role has not been named in versions of the new academic structure. The Director Research and Enterprise is advocating for an equivalent role in the Renewal Plan structure.

# Unitec Research Committee (URC) Minutes

14 February 2019

2pm to 4pm

55-1004 Penman House - Unitec Mt Albert Campus

## 1. WELCOME & APOLOGIES

### Apologies:

Christian Probst, Heather Stonyer, Kristie Cameron, Roger Birchmore, Yusef Patel

### Absent:

Myles Durrant

The committee noted that Nick Kearns and Ray Jauny both had resigned; it was Ray's last URC meeting. The Chair acknowledged their work and contribution.

## 2. Confirmation of the minutes of the 8 November 2018 meeting

The minutes will be ratified in the next URC meeting.

## 3. Matters arising from the previous minutes

Agenda Item	Matter Arising	Responsible	Outcome
4	Revisit scope for a Research Symposium working group early in 2019.	Kristie Cameron	Rolled over to next meeting
8	Present the Research Time Allocation report to Leadership team early 2019.	Marcus Williams	Rolled over to action in March/April

## 4. Planning for 2019 URC meetings

Committee noted that Tūāpapa Rangahau is moving to a new location (old Pasific Center) date to be confirmed.

Committee agreed to have one meeting per month from 1pm - 3pm.

<b>Action:</b> Asma to setup meetings for 2019 and send draft schedule to the Chair for approval.
---

## 5. Renewal Plan 2019 and impact on the URC

Unitec is in the state of change. Previously, there were two different entities Research Leaders and Unitec Research Committee. Both entities have different roles to play. Research leaders were the implementers and their roles were more operational. The Unitec Research Committee was more focused on thought leadership. Due to a change in Unitec structure, Marcus proposed a possible structure for URC, in which the Research Leaders were also the URC representative for each school.

The proposed structure is:

Director of Research and Enterprise (Chair)

Secretary

Student representation

Māori representation

Pacifika representation

Industry Workforce Development

Knowledge Specialist

Representation from each school

ePress Editor (non-voting)

The above representation must in sum comprise the following;

2 X New and Emerging Researchers

2 X Early Career Researchers

2 X Professoriate

Marcus sought committee' feedback.

The new proposed structure will be submitted to Academic Board and the decision will be made in March.

The Committee also reviewed URC Terms of Reference and agreed to make a change to point "e";

**From:** *Oversight of internal contestable funding and the reporting of funded projects*

**To:** *Oversee the Grants Advisory Committee and the reporting of funded projects*

**Action:** Marcus to circulate a draft memo to the committee members who attended meeting on 14 February.

**Action:** Asma to make changes in the Terms of Reference.

## **6. Research Leaders – where to from here?**

Under the new Unitec structure, there are strong indications that Research Leaders will be re-established, decision pending.

## **7. Work Plan for 2019**

The committee agreed to create a work plan with milestones to; review Research Strategy and relevant policies/guidelines; the Conduct of Student Research Policy, the Conduct of Research Policy and the Research Ethics Policy.

## **8. General Business**

A point was raised by Falaniko about community engaged research. The committee agreed that there is a need for Unitec research to be more community engaged research and agreed this is an important part of the new Research Strategy.

Meeting was closed at 3.30pm

Next URC meeting will be on 14 March 2019 @ 1pm – 3pm



## Matters Arising from 14 February 2019 Meeting

Agenda Item	Matter Arising	Responsible	Outcome
4	Setup meetings for 2019 and send draft schedule to the Chair for approval.	Asma Munir	Completed
5	Circulate a draft memo to the committee members who attended meeting on 14 February.	Marcus Williams	Completed
	Make changes in the Terms of Reference.	Asma Munir	Completed

## Unitec Research Committee (URC) Work Plan - 2019

### Research Strategy Timeline:

<i><b>Item</b></i>	<i><b>Timeline</b></i>
1. Design Consultation Process	
2. Implement Consultation	
3. Collate Themes and Discuss	
4. Create First Draft	

### Research Policy Timeline:

<i><b>Item</b></i>	<i><b>Timeline</b></i>
<b>Conduct of Research Policy</b>	
1.	
2.	
3.	
<b>Conduct of Student Research Policy</b>	
1.	
2.	
3.	
<b>Research Ethics Policy</b>	
1.	
2.	
3.	



# memo

---

To	Unitec Research Committee	Date	28 Feb 2019
CC			
From	Helen Gremillion Research Professional Development Liaison	Phone No.	7510
Subject	Proposal for process to advise on contentious ROMS entries		

---

I propose that a small subcommittee of the URC review and render decisions on contentious ROMS entries.

At times, ROMS entries become contentious: Do they meet the definition of research? To which category of research do they belong? Are they more properly research contributions?

It can be problematic for a final decision to rest with a single person, Research Adviser. Items that seem to fall into a grey area could go to this subcommittee for consideration. The decision-making process in such cases would then be informed by multiple perspectives. Business could be conducted digitally.



# memo

---

To	Unitec Research Committee	Date	25 February 2019
From	Associate Professor Dan Blanchon Head of Environmental and Animal Sciences		
Subject	Nominations for Appointment of a Research Fellow		

---

I am requesting that the Unitec Research Committee approves the appointment of Dr Linton Winder as a Research Fellow within the School of Environmental and Animal Sciences.

Linton was Head of the Department of Natural Sciences at Unitec 2011-2015, before moving to Waiariki/Toi Ohomai Institute of Technology. He has now made a lifestyle change to the South Island, but is still working in research, and has maintained collaborations with the Environmental and Animal Sciences team at Unitec (most recently in projects with Dan Blanchon and Glen Aguilar).

Linton has a strong research record, publishing books and journal papers related to conservation biology, agro-ecology, sustainability and ecological studies and attracting external funding (in particular from ADMARDT). Of particular interest to EAS are Linton's abilities in data analysis and modelling using ecological and agricultural datasets.

Awarding Linton a Unitec Research Fellowship will enable us to collaborate more effectively with Linton, and fast-track the production of publications. Linton's expertise is also potentially of value to projects with a horticultural or agricultural focus.

## ***Curriculum vitae***

### **PERSONAL DETAILS**

---

Name: Linton Winder  
Phone: 022 045 3108  
Email: [lintonwinder@yahoo.co.uk](mailto:lintonwinder@yahoo.co.uk)  
ResearchGate: [https://www.researchgate.net/profile/Linton\\_Winder](https://www.researchgate.net/profile/Linton_Winder)

### **BRIEF PROFILE**

---

I have extensive experience in teaching biology, applied statistics, and research methods at undergraduate and postgraduate levels. I have worked in a number of tertiary education organisations in the UK, Mauritius, Fiji, and New Zealand. I have both developed and delivered courses in statistics, biodiversity conservation, ecology and sustainable agriculture, and am an experienced assessor of student's work. I am also familiar with online platforms such as Moodle and Turnitin.

I have a strong research profile, publishing work related to conservation biology, agro-ecology and ecological statistics. I have also supervised student research projects at undergraduate, masters and PhD levels.

My skills and experience include teaching and learning, quality assurance, health and safety, business development, financial management, stakeholder engagement, management of staff, strategic leadership, and research and knowledge transfer.

I am a friendly, adaptable, dedicated, calm, and well organised professional educator. From my extensive background in research, I also have a strong international reputation and have substantial experience of knowledge transfer activities.

### **HIGHER EDUCATION**

---

1987-90	PhD. Modelling the effects of polyphagous predators on the population dynamics of the grain aphid <i>Sitobion avenae</i> . Rothamsted Experimental Station and University of Southampton.
1981-85	BSc (Hons.) Environmental Science, upper second. University of Southampton.

### **OTHER QUALIFICATIONS**

---

2016	Level 4 Short Award in Te Reo Māori (Te Kakano).
------	--

### **EMPLOYMENT**

---

2018-	Guide, Oamaru Blue Penguin Colony.
2017-2018	Professor and Faculty Leader of Primary Industries, Science and Environment, Toi Ohomai Institute of Technology, Rotorua.
2015-2017	Head of Department and Professor, Forestry and Resource Management, Waiariki/Toi Ohomai Institute of Technology, Rotorua.
2011-2015	Head of Department and Professor, Natural Sciences, Unitec, Auckland.
2008-2011	Research & Knowledge Transfer Manager supporting Biosciences, University of Exeter, UK.

2006-2007	Associate Dean (Research & Consultancy) and Professor, Faculty of Science and Technology, University of the South Pacific, Fiji.
2004-2005	Head of Department of Biology, Faculty of Science and Technology, USP, Fiji.
1997-2004	Senior Lecturer, Seale-Hayne Agricultural College, University of Plymouth, UK.
1993-1997	Lecturer/Senior Lecturer, School of Conservation Sciences, Bournemouth University, UK.
1990-1993	Biologist, National Rivers Authority, UK.
1986-1987	Programmer, British (Gas Southern), UK.

---

## TEACHING AND LEARNING

I am an accomplished teacher at all levels of tertiary education, spanning certificate-level to PhD study. My own teaching has focused on statistics, quantitative biology, modelling, research methods, ecology, sustainable agriculture and conservation biology.

As a leader I have supported staff to excel in academic quality processes. I have been an innovator in the UK, Fiji and New Zealand by developing new programmes of study that meet new needs. I have helped develop New Zealand national qualifications through participation in TroQ governance groups, have participated in the NZQA External Evaluation and Review process and worked with TEC to develop programmes that meet industry and learner's needs.

---

## RESEARCH

- Focus on conservation biology and sustainable agriculture;
- RG score of 30.5 that is higher than 87.5% of ResearchGate members;
- Google Scholar H-index of 21;
- Best papers cited 356 and 174 times (Google Scholar) in journal with Impact Factor of 10.7 (Ecology Letters);
- NZ PBRF rated 2012 (and submitted in current PBRF evaluation);
- Substantial track record of gaining competitive research funding in the UK, Fiji and New Zealand;
- Successful supervision of masters and PhD students.

---

## RECENT COMPETITIVE RESEARCH FUNDING AS CO-INVESTIGATOR

2016	Novel biological approach to combat a new glasshouse pest. AGMARDT, NZ\$80K. Co-investigator led by Professor Steve Wratten.
2016	Mesh crop covers for potato pest and control. AGMARDT, NZ\$20K. Co-investigator led by Dr Charles Merfield, BHU Future Farming Centre.
2015	Using mitochondrial genome resources for diagnostics of eukaryotic pest and disease risk agents of concern to NZ Primary Industries. Subcontract from Bio Protection Core funding, NZ\$95K. With Peter Lockhart (Massey University) and Stan Bellgard (Landcare Research).

---

## COMPETITIVE RESEARCH FUNDING AS PRINCIPAL INVESTIGATOR

2014	Rapid pest and disease profiling. Agricultural and Marketing Research and Development Trust, NZ\$20K. With Professor Peter Lockhart (Massey University) and Dr Simon Hodge
------	--

	(Lincoln University).
2006-2009	Biodiversity studies of the South Pacific fauna and flora using molecular biology. New Zealand Overseas Development Fund (NZODF), NZ\$250K. PI in host country in collaboration with Allan Wilson Centre, Landcare and Institute of Applied Sciences.
2006-2008	Focus on Fiji: Insect inventories for conservation. Darwin Initiative, DEFRA, £200K. PI in host country in collaboration with the University of Sussex.
2004-2005	Development of RFID Technology for insect tracking, Biotechnology and Biological Sciences Research Council, £80K.
2003-2006	Rediscovering the neglected insects of Mauritius: Building in-country capacity. Darwin Initiative, DEFRA, £60K. In collaboration with Mauritian Wildlife Foundation.
2003	Spatially explicit distribution of termites in logged-over and primary rainforest. Seale-Hayne Educational Trust, £4K.
2002-2005	Individual-based spatio-temporal predator-prey dynamics. Biotechnology and Biological Sciences Research Council, £225K. In collaboration with Rothamsted Research.
2002	Travel award to visit Mauritian Wildlife Foundation. The Royal Society, £4K.
1999-2001	Spatio-temporal predator prey dynamics. Biotechnology and Biological Sciences Research Council, £175K. In collaboration with Rothamsted Research.
1999-2001	Assessment of biodiversity in field boundaries. The Game Conservancy Trust, £4K.
1998-2000	An investigation into the importance of propagule provenance in restoration ecology. Tarmac Roadstone, £10K.
1998-1999	Investigation of the effects of crop growth on aphid population dynamics. ADAS, £8K.

## KNOWLEDGE TRANSFER

---

Whilst working at the University of Exeter I was the Research and Knowledge Transfer Manager for Biosciences. The University of Exeter has transformed itself into a world-recognised research institution over the last decade. My role focussed on developing knowledge transfer and research opportunities, business partnerships and national and international collaborations. We built networks and key stakeholder relationships across and beyond the university.

## RECENT PROFESSIONAL ACTIVITIES (2014 onwards)

---

### *Research-focused professional activities*

- Associate Member of the Biological Husbandry Unit's 'Future Farming Centre';
- Adjunct Professor, School of Biological and Chemical Sciences, University of the South Pacific;
- Visiting Researcher, Institute of Applied Science, University of the South Pacific;
- Professorial appointment advisor for Swedish University of Agricultural Sciences;
- Invited member of UN meeting on science for Small Pacific Island States;
- Royal Society South East Asia Rainforest Partner;
- Member of Editorial Board, Bulletin of Entomological Research;
- Editor, Rethinking Ecology;
- Phd supervisor;
- Masters and PhD examiner for the University of the South Pacific, Fiji and Lincoln University.

#### *Other professional activities*

- Member of Royal Society of New Zealand's 'Science Technicians Workforce Panel';
- Member of Toi Ohomai's and Unitec's Research Committees;
- Member of Unitec's Sustainability Committee;
- Member of Unitec's 'Future Thinkers' Strategy Group;
- Member of Forestry and Wood Action Group, Bay of Connections;
- Member of Unitec's Organic Community Garden Steering Group;
- Organising committee for 2017 New Zealand Institute of Forestry Conference.

#### *Society Memberships*

- Fellow of the Royal Entomological Society.



### BOOKS

- Winder, L.** and Flemmer, R. (In Press). Robot-enhanced insect pest control: reality or fantasy? Book chapter in: Integrated management of Insect Pests: Current and Future Developments (ed. Emeritus Prof. Marcos Kogan and Prof. Leon Higley). BDS Publishing.
- Winder, L.** and Woiwod, I. (2007). Populations, Metapopulations: Elementary Units of IPM Systems. Chapter in: *Perspectives in Ecotheory and Integrated Pest Management* (eds. M Kogan and PC Jepson). Cambridge University Press.
- Merrington, G., **Winder, L.**, Parkinson, R. and Redman, M. (2002). *Agricultural Pollution: Problems and Practical Solutions*. E & FN Spon.
- Diamond, M., Hirst, D., **Winder, L.**, Crawshaw, D. H. and Prigg, R. F. (1991). The effect of liming agricultural land on the water quality of the River Esk, Cumbria. In: *Acid deposition: origins, impacts and abatement strategies*, edited by Longhurst, J.W.S. pp. 227-238. CABI.

### PAPERS

- Merfield, C.N., **Winder, L.**, Stilwell, S.A., Hofmann, R.W., Bennett, J.R., Wargent, J.J. and Hodge, S. (2019). Mesh crop covers improve potato yield and inhibit tomato potato psyllid and blight: The roles of mesh pore size and ultraviolet radiation. *Annals of Applied Biology*. DOI: 10.1111/aab.12489.
- Winder, L.**, Alexander, C., Griffiths, G., Holland, J., Woolley, C. and Joe Perry (2019). Twenty years and counting with SADIE: Spatial Analysis by Distance Indices software and review of its adoption and use. *Rethinking Ecology* **4**, 1-16. DOI: 10.3897/rethinkingecology.4.30890.
- Waqa-Sakiti, H., Hodge, S. and **Winder, L.** (2018). Distribution of long-horn beetles (Cerambycidae: Coleoptera) within the Fijian archipelago. *The South Pacific Journal of Natural and Applied Sciences* **36**, 1-8.
- Winder, L.** and Hodge, S. (2017). A manifesto for fair and equitable research funding in ecology. *Rethinking Ecology* **2**, 47-56. DOI: 10.3897/rethinkingecology.2.21798
- Blanchon, D. Or, E., Reynolds, C., and **Winder L.** (2017). Distribution and community composition of lichens on mature mangroves (*Avicennia marina* subsp. *australasica* (Walp.) J.Everett) in New Zealand. *PlosOne* **12**(6). DOI: 10.1371/journal.pone.0180525.
- Smith, B., Diaz, A., and **Winder, L.** (2017). Grassland habitat restoration: lessons learnt from a UK case study 1997-2014. *PeerJ* **5**(12):e3942. DOI: 10.7717/peerj.3942.
- Naikatini, A., Thomas, N., Boseto, D., Copeland, L., Rounds, I., Pene, S, Tuiwawa, M., Morrison, C., and **Winder, L.** (2017). Survey of endemic, native and invasive vertebrates in the Sovi Basin, Fiji, 2003-2015. *Pacific Science* **71**, 241-255.
- Aguilar, G.D., Waqa-Sakiti, H., & **Winder, L.** (2016). GIS For Conservation. Using Predicted Locations and an Ensemble Approach to Address Sparse Data Sets for Species Distribution Modelling: Long-horned Beetles (Cerambycidae) of the Fiji Islands [Report]. Unitec ePress.
- Agabiti, B., Wassenaar, R., **Winder L.** (2016). Dropping behaviour of pea aphid nymphs increases their development time and reduces their reproductive capacity as adults. *PeerJ* **4**:e2236; DOI 10.7717/peerj.2236.
- Boyer, S., Lefort, M-C., & **Winder, L.** (2016). Rethinking Ecology - Challenging Current Thinking in Ecological Research. *Rethinking Ecology* **1**, 1-8. doi:10.3897/rethinkingecology.1.11230.
- Yabaki, M., Winkworth, R.C., McLenachan, P.A., Aalbersberg, W., **Winder, L.**, Trewick, S. and Lockhart, P.J. (2016). Placing the Fijian Honeyeaters within the Meliphagidae radiation: implications for origins and conservation. *Pacific Conservation Biology* **22** 262-271.
- Sakiti, H., **Winder, L.**, Lingafelter, S.W. (2015). Review of the genus *Ceresium* Newman, 1842 (Coleoptera, Cerambycidae) in Fiji. *ZooKeys* **532**: 15–53. doi: 10.3897/zookeys.532.6.
- Aguilar, G.D., Farnworth, M.J., **Winder L.** (2015). Mapping the stray domestic cat (*Felis catus*) population in New Zealand: Species distribution modelling with a climate change scenario and implications for protected areas. *Applied Geography* **63**, 146–154.

- Morley, C.G., and **Winder, L.** (2015). The vulnerability of skinks to predation by introduced mongoose in the Fiji Islands. *Pacific Science*. 69: 313-317.
- Winder, L.**, Alexander, C.J., Woolley, C., Perry, J.N., Holland, J.M. (2014). Cereal aphid colony turnover and persistence in winter wheat. *PLoS One* 30;9:e106822.
- Wang, J., McLenachan, P.J., Biggs, P.J., **Winder, L. H.**, Schoenfeld, B.I.K., Narayan, V.V., Phiri, B.J., and Lockhart, P.J. (2013). Environmental bio-monitoring with high-throughput sequencing. *Briefings in Bioinformatics*. doi: 10.1093/bib/bbt032.
- Morley, CG, and **Winder, L.** (2013). The effect of the small Indian mongoose (*Urva auropunctatus*), island quality and habitat on the distribution of native and endemic birds on small islands within Fiji. *Plos One*. **8**. doi:10.1371/journal.pone.0053842.
- Winder, L.**, Alexander, C. J., Woolley, C., Perry, J. N., and Holland, J. M. (2013). The spatial distribution of canopy-resident and ground-resident cereal aphids (*Sitobion avenae* and *Metopolophium dirhodum*) in winter wheat. *Arthropod-Plant Interactions*. **7**, 21-32.
- Waga-Sakiti, H., and **Winder, L.** (2012). Diversity and distribution of forest canopy Coleoptera on eastern Viti Levu, Fiji Islands. *Pacific Conservation Biology*. **18**, 177-185.
- Thomas, N., Morrison, C., **Winder L.**, Morley, C. (2011). A new technique for comparing spatial distributions of co-occurring vertebrate species: Case study of an endangered frog (*Platymantis vitanus*) and an introduced toad (*Bufo marinus*) on Viwa Island, Tailevu, Fiji. *Pacific Conservation Biology* **17**, 68-77.
- Florens, F.B.V., Mauremootoo J.R., Fowler S.V., **Winder L.**, Baider C (2010). Recovery of indigenous butterfly community following control of invasive alien plants in a tropical island's wet forests. *Biodiversity & Conservation* **19**, 3835-3848.
- Smith, B.M., Diaz, A., Daniels, R., **Winder, L.** & Holland, J.M. (2009). Regional and ecotype traits in *Lotus corniculatus* L., with reference to restoration ecology. *Restoration Ecology* **17**, 12-23.
- Griffiths, G.J.K., Alexander, C., Perry J.N., Holland, J.M., Symondson, W.O.C., Kennedy, P.J., **Winder, L.** (2008). Monoclonal antibodies reveal changes in predator efficiency with prey spatial pattern. *Molecular Ecology* **17**, 1828-1839.
- Griffiths, G.J.K., **Winder, L.**, Holland, J.M., Thomas, C.F.G. & Williams, E. (2007). The representation and functional composition of carabid and staphylinid beetles in different field boundary types at a farm-scale. *Biological Conservation* **135**, 145-52.
- Donovan S.E., Griffiths G.J.K., Homathevi R. & **Winder L.** (2006). The spatial pattern of soil-dwelling termites in primary and logged-over forest in Sabah, Malaysia. *Ecological Entomology* **32**, 1-10.
- Alexander, C.J., Holland, J.M., **Winder, L.**, Woolley, C. and Perry, J.N. (2005). Performance of sampling strategies in the presence of known insect spatial pattern. *Annals of Applied Biology* **146**, 361-370.
- Duffield, S.J., **Winder, L.** and Chapple, D.G. (2005). Calibration of sampling techniques and determination of sample size for the estimation of egg and larval populations of *Helicoverpa* spp. (Lepidoptera: Noctuidae) on irrigated soybean. *Australian Journal of Entomology* **44**, 293-298.
- Griffiths, G.J.K., Alexander, C.J., Birt, A., Holland, J.M., Kennedy, P.J., Perry, J.N., Preston R. & **Winder, L.**, (2005). A method for rapidly mass laser-marking individually coded carabid beetles in the field. *Ecological Entomology* **30**, 391-396.
- Smith, B., **Winder L.**, Diaz, A. & Daniels, R. (2005). The effect of provenance on plant establishment in a restoration environment. *Biological Conservation* **125**, 37-46.
- Winder, L.**, Alexander, C.J., Holland, J.M., Symondson, W.O.C., Perry, J.N. & Woolley, C. (2005). Predatory activity and spatial pattern: the response of generalist carabids to their aphid prey. *Journal of Animal Ecology* **74**, 443-454.
- Winder, L.**, Griffiths, G.J.K., Perry, J.N., Alexander, C.J., Holland, J.M., Kennedy, P.J. & Birt, A. (2005). The role of large-scale spatially explicit and small-scale localized processes on the population dynamics of cereal aphids. *Bulletin of Entomological Research* **95**, 579-587.
- Winder, L.** (2004). Marking by abrasion or branding and recapturing carabid beetles in studies of their movement. *International Journal of Pest Management* **50**, 161-164.
- Holland, J.M., **Winder, L.**, Woolley, C., Perry, J.N. & Alexander, C. (2004). The spatial dynamics of crop and ground active predatory arthropods and their aphid prey in winter wheat. *Bulletin of Entomological Research* **94**, 419-431.

- Griffiths, G., **Winder, L.**, Bean, D., Preston, R., Moate, R., Neal, R., Williams, E., Holland, J.M. and Thomas, G. (2001). Laser marking the carabid *Pterostichus melanarius* for mark-release-recapture. *Ecological Entomology* **26**, 663-664.
- Winder, L.**, Alexander, C.J., Holland, J.M., Woolley, C. & Perry, J.N. (2001). Modelling the dynamic spatio-temporal response of predators to transient prey patches in the field. *Ecology Letters* **4**, 568-576.
- Winder, L.**, Holland, J.M., Perry, J.N., Woolley, C., Alexander, C.J. (2001). The use of barrier-connected pitfall trapping for sampling predatory beetles and spiders. *Entomologia Experimentalis et Applicata* **98**, 249-258.
- Holland, J.M., **Winder, L.** and Perry, J.N. (2000). The impact of dimethoate on the spatial distribution of beneficial arthropods in winter wheat. *Annals of Applied Biology* **136**, 93-105.
- Beed, F., **Winder, L.**, Marchesi, A. and Duffield, S. (1999). The effect of reducing growth in winter wheat on the population dynamics of the grain aphid *Sitobion avenae* (F.). *Agricultural and Forest Entomology* **1**, 281-286.
- Holland, J.M., Perry, J.N. and **Winder, L.** (1999). The within-field spatial and temporal distribution of arthropods in winter wheat. *Bulletin of Entomological Research* **89**, 499-513.
- Perry, J.N., **Winder, L.**, Holland, J.M. and Alston, R.D. (1999). Red-blue plots for detecting clusters in count data. *Ecology Letters* **2**, 106-113.
- Winder, L.**, Perry, J.N. and Holland, J.M. (1999). The spatial and temporal distribution of the grain aphid *Sitobion avenae* in winter wheat. *Entomologia Experimentalis et Applicata* **93**, 277-290.
- Winder, L.**, Merrington, G. and Green, I. (1999). The tri-trophic transfer of Zn from the agricultural use of sewage sludge. *The Science of the Total Environment* **229**, 73-81.
- Merrington, G., **Winder, L.** and Green, I. (1997). Bioavailability of cadmium and zinc from soils amended with sewage sludge to winter wheat and subsequently to the grain aphid *Sitobion avenae*. *The Science of the Total Environment* **205**, 245-254.
- Merrington, G., **Winder, L.** and Green, I. (1997). The uptake of cadmium and zinc by the bird-cherry oat aphid *Rhopalosiphum padi* (Homoptera: Aphididae) feeding on wheat grown on sewage sludge amended agricultural soil. *Environmental Pollution* **96**, 111-114.
- Sunderland, K., Axelsen, J.A., Dromph, K., Freier, B., Hemptinne, J.L., Holst, N.H., Mols, P.J.M., Petersen, M.K., Powell, W., Ruggle, P., Triltsch, H. and **Winder, L.** (1997). Pest control by a community of natural enemies. *Acta Jutlandica* **72**, 271-326.
- Taylor, D. and **Winder, L.** (1997). The use of imitation sand lizards to assess the accuracy of visual surveying techniques. *The Herpetological Journal* **7**, 119-121.
- Winder, L.**, Carter, N. and Wratten, S.D. (1997). Spatial Heterogeneity and predator searching behaviour - can carabids detect patches of their aphid prey? *Acta Jutlandica* **72**, 47-62.
- Winder, L.**, Lefley, M. and Smith, B. (1997). A key for freshwater invertebrates using fuzzy logic. *Computer Applications in the Biosciences* **13**, 169-174.
- Winder, L.**, Hirst, D., Carter, N., Wratten, S.D. and Sopp, P.I. (1994). Estimating predation of the grain aphid *Sitobion avenae* by polyphagous. *Journal of Applied Ecology* **31**, 1-12.
- Diamond, M., Hirst, D., **Winder, L.**, Crawshaw, D. and Prigg, R.F. (1992). The effect of liming agricultural land on the chemistry and biology of the River Esk, North West England. *Environmental Pollution* **78**, 179-185.
- Winder, L.** (1990). Predation of the cereal aphid *Sitobion avenae* by polyphagous predators on the ground. *Ecological Entomology* **15**, 105-110.
- Wratten, S.D., Edwards, P.J. and **Winder, L.** (1988). Insect herbivory in relation to dynamic changes in host plant quality. *Biological Journal of the Linnean Society* **35**, 339-350.

## CONFERENCES

- Boyer, S., Lefort M-C., and Winder, L. (2018). Rethinking Ecology, a new journal fostering new thinking in ecological research. 5th European Congress of Conservation Biology. DOI: 10.17011/conference/eccb2018/108026.
- Boyer, S., Lefort, M-C., and **Winder, L.** (2017). Rethinking Ecology - A journal to publish your 'crazy and ambitious' ideas. Crazy and Ambitious Conference, Wellington. DOI: 10.13140/RG.2.2.19311.64164.

- Bellgard, S.E, Probst, C., Walker, C., Leddy, N., Pattison, N. and **Winder, L.** (2015). Oomycete genus and hybrid phytophthora discovered as part of stream-based catchment surveillance for kauri dieback. Australasian Plant Pathology Society Conference, 14-16th September, 2015, Fremantle, Western Australia.
- Morley, C., and **Winder, L.** (2014). Can we ensure the long-term survival of skinks on Fijian Islands? Society for Conservation Biology Oceania Conference, 7-11 July 2014, University of the South Pacific, Fiji.
- Reynolds, C., Er, O., **Winder, L.**, and Blanchon, D. (2014). Distribution and community composition of lichens on mature mangroves (*Avicennia marina* subsp. *australasica*) in New Zealand., New Zealand Ecological Society Conference, Palmerston North, 16-21 November 2014
- Morley, C., and **Winder, L.** (2013). The effect of the small Indian mongoose (*Urva auropunctatus*), island quality and habitat on the distribution of native and endemic birds on small islands within Fiji. 26th International Congress for Conservation Biology, Baltimore, Maryland, USA, July 21-25, 2013.
- Waga-Sakiti, H., Aguilar, G., and **Winder, L.** (2013). Ensemble species distribution modelling of Coleoptera in Viti Levu, Fiji. 12th Pacific Science Inter-Congress, 8-12 July 2013 University of the South Pacific, Laucala Bay Campus, Suva, Fiji.
- Morley C., **Winder L.** (2007). The Effect of Mongoose on the Distribution of Native and Introduced Birds in the Fiji Islands. Biodiversity Extinction Crisis Conference 10–12 July 2007, Sydney, Australia.
- Thomas, N., **Winder, L.**, Morrison, C. (2007). Determining the spatial associations of the Fiji Ground Frog and the Cane Toad on Viwa Island, Fiji using SADIE: Implications for conservation and management. Biodiversity Extinction Crisis Conference 10–12 July 2007, Sydney, Australia.
- Winder L.**, Perry J., Alexander C.J., Holland J.M., Symondson W.O.C. (2007). Feeding and movement of *Poecilus cupreus* in relation to distribution of aphid prey Griffiths G.J.K., Molecular approaches to study trophic interactions: Current progress and future directions 1-3 March 2007 Institute of Ecology Innsbruck University, Austria
- Donovan, S., Griffiths, G., Homathevi, R. & **Winder, L.** (2005). Spatial aggregation of soil-feeding termites in primary and logged over forest in Malaysia. ESA 2005, Montreal.
- Griffiths, G.J.K., **Winder, L.**, Perry, J.N., Alexander, C., Holland, J.M., Kennedy, P., Birt, A. & Preston, R. (2005). Laser marking carabid beetles for mark-release-recapture. Paper presented at Measuring Behaviour 2005, 5th International Conference on Methods and Techniques in Behavioral Research, 30 August - 2 September 2005, Wageningen, The Netherlands.
- Perry, J., Alexander, C., Holland, J. **Winder, L.** & Griffiths, G. (2005). Spatial patterns at different scales for beetle predators and aphid prey. ESA 2005, Montreal.
- Griffiths, G., **Winder, L.**, Perry, J., Alexander, C. & Holland, J. (2005). Spatio-temporal dynamics of individually marked beetles in relation to aphid distributions at different spatial scales. ESA 2005, Montreal.
- Smith, B., Diaz, A., **Winder, L.** & Oaten, H. (2005). Society for Ecological Restoration. The importance of plant provenance in restoration schemes. 13 – 16<sup>th</sup> September, Zaragoza, Spain.
- Griffiths, G.J.K. & **Winder, L.** (2004). Laser marking carabid beetles for mark-release-recapture. BES Agroecology group conference on 'The spatial distribution of invertebrates in agroecosystems', 4<sup>th</sup> March 2004.
- Winder, L.** (2004). Spatio-temporal dynamics of the generalist *Pterostichus melanarius* at the field scale. BES Agroecology group conference on 'The spatial distribution of invertebrates in agroecosystems', 4<sup>th</sup> March 2004.
- Alexander, C.J. & **Winder, L.** (2004). Spatio-temporal dynamics of individually marked beetles. BES Agroecology group conference on 'The spatial distribution of invertebrates in agroecosystems', 4<sup>th</sup> March 2004.
- Griffiths, G.J.K. & **Winder, L.** (2003). Laser marking carabid beetles for mark-release-recapture. Applications if Computing in Entomology, Royal Entomological Society Special Interest Group meeting, 3 December 2003.
- Griffiths, G.J.K., Williams, E., **Winder, L.**, Holland, J.M. and Thomas, C.F.G. (2000). The importance of field boundaries for whole-farm biodiversity conservation. *BCPC Conference: Pests & Diseases 2000, Vols 1-3, Proceedings*, 491-494.
- Winder, L.**, Woolley, C., Holland, J.M., Perry, J.N. and Alexander, C.J. (2000). The field scale distribution of insects in winter wheat. *BCPC Conference: Pests & Diseases 2000, Vols 1-3, Proceedings*, 573-578.
- Holland, J.M., **Winder, L.**, and Perry, J.N. (1999). Arthropod prey of farmland birds: their spatial distribution within a sprayed field with and without buffer zones. *Aspects of Applied Biology* 54.

- Winder, L.**, Holland, J.M. and Perry, J.N. (1998). The within-field spatial and temporal distribution of the grain aphid (*Sitobion avenae*) in winter wheat. *Brighton Crop Protection Conference Proceedings*, 1089-1094.
- Blackshaw, R.P., **Winder, L.** and Lefley, M. (1998). Potential of fuzzy logic in crop protection decision making. *Brighton Crop Protection Conference Proceedings*, 449-454.
- Merrington, G., **Winder, L.** and Green, I. (1998) Trace metals in low applications of sewage sludge to farm land; protected or potentially harmful ? Poster In Contaminated Soil '98, 17 - 21 May, Edinburgh. F. Arendt, R. Bosman and W.J. van den Brink (eds). Kluwer Academic.
- Merrington, G., **Winder, L.** and Green, I. (1996). The bioavailability of Cd and Zn to the bird-cherry oat aphid *Rhopalosiphum padi* (Homoptera: Aphididae) feeding on wheat grown on sewage sludge amended agricultural soil. Paper presented at British Society of Soil Science Meeting, 22-25 September, Dundee.
- Diamond, M., Hirst, D., **Winder, L.**, Cragg-Hine, D. and Crawshaw, D. (1990). The effect of agricultural liming on the River Esk. *Proceedings of International Conference on Acidic Deposition, Glasgow*. The Royal Society of Edinburgh.