



# ESA2020: Understanding Ecological Extremes – Mechanisms of Resilience and Recovery

## Conference Program

Please note that this program is subject to change without notice at anytime. Times are AEDT (Sydney / Melbourne / Canberra time zone)

Monday 30 November 2020

9:00 – 10:00					PLENARY SESSION ONE Chair: Bek Christensen				
					Conference Opening & Acknowledgement of Country President's Address				
					Indigenous Keynote presentation: Vanessa Cavanagh <i>Aboriginal women and cultural burning, as a way of caring for country</i>				
10:00 – 12:00					CONCURRENT SESSIONS 1				
		SYMPOSIUM: Temperature Extremes: impacts, resilience and mitigation (Thermal Tolerance) CHAIR: Alicia Cook		SYMPOSIUM: Indigenous Ecological Knowledge 10th Anniversary Symposium CHAIR: Gerry Turpin		SYMPOSIUM: Soil microbial responses to climate extremes: mechanisms, patterns, interactions CHAIR: Christina Birnbaum		OPEN FORUM: Urban Ecology (1) CHAIR: Sam Lloyd	
		Associate Professor Andy Leigh, University of Technology Sydney <i>What does thermal tolerance tell us about life and death?</i>		Dr Georgia Ward-Fear, Macquarie University <i>Sharper eyes see shy lizards: Collaboration with indigenous peoples alters the outcome of conservation research</i>		Hans Ammitzboll, PhD Candidate, University of Tasmania <i>Soil microbial succession after fire in logged Tasmanian wet eucalypt forests</i>		Katherine Berthon, PhD Candidate, ICONScience, RMIT University <i>Plant-Insect Dating in the City: how design context influences the way pollinators interact with plants</i>	
		Dr Samuel Andrew, Postdoc, CSIRO <i>Modelling the climate limits of plant functional trait strategies</i>		Bernadette Duncan, Kamilaroi <i>Bridging the gaps between traditional/western science to support Aboriginal women's health, wellbeing, and empowerment</i>		SPEED TALK: Joshua Vido, PhD Student, La Trobe University <i>The effect of fire intensity and soil moisture on bacterial secondary succession in soil mesocosms</i>  SPEED TALK: Natalie Hejl, PhD Candidate, Macquarie University		Manuel Lequerica, Doctoral Candidate, The University of Sydney <i>Diversity and abundance of urban hoverflies is associated with local—rather than landscape—scale attributes</i>	

			<i>Investigating the resilience of upland swamp communities to extreme events with environmental DNA</i>	
	Dr Verónica Briceño Rodríguez, Postdoctoral Fellow, ANU <i>Pushing against thermal limits: Do alpine, desert and temperate species differ in thermal tolerance breadth?</i>	Patrick Cooke, Student, Macquarie University <i>To disperse or not to disperse? Multidisciplinary evidence of Aboriginal dispersal of Bunya Pines connections</i>	SPEED TALK: Dr Adam Frew, Lecturer, University of Southern Queensland <i>The effects of elevated CO<sub>2</sub> on plants and the arbuscular mycorrhizal symbiosis</i>  Dr Anna Hopkins, Senior Lecturer, Edith Cowan University <i>Soil fungal responses to the stacked disturbances of drought and wildfire in a Mediterranean-type forest</i>	Mahmuda Sharmin, PhD Candidate, Western Sydney University <i>How do leaf and canopy traits relate to sub-canopy air temperature of urban tree species?</i>
	Anthea Challis, PhD Student, Western Sydney University <i>A cool growth environment enhances photosynthetic heatwave resistance and resilience in cool-wet climate region trees</i>	Bridget Campbell, PhD Candidate, Macquarie University <i>Wanaka Wan'kurra? Biocultural investigation of critical weight range mammal resilience in north east Arnhem Land</i>	SPEED TALK: Frederick Dadzie, Student, UNSW, Sydney <i>Native microorganisms improve seedling emergence of Acacia inaequilatera but not Triodia epactia during dryland restoration</i>	Ehlana Davidson, School of Biological Sciences, The University of Queensland <i>Life is a highway: Predicting road deaths in urban ringtail possums (Pseudocheirus peregrinus)</i>
	Dr Pieter Arnold, Postdoctoral Research Fellow, The Australian National University <i>Shapes of thermal plasticity vary among trait types in an alpine plant</i>	SPEED TALK Teagan Goolmeer, University of Melbourne <i>Improving the protection and recovery of culturally significant species</i>	Dr Miriam Munoz-Rojas, ARC DECRA Research Fellow UNSW Sydney <i>Global change impacts on soil microbial diversity and function: implications for soil and ecosystem restoration</i>	Jacinta Humphrey, PhD Candidate, La Trobe University <i>Housing or habitat: What drives patterns of urban bird diversity?</i>
	Dr Onoriode Coast, Senior Fellow University of Greenwich <i>Acclimation to warming increases the thermal limits of leaf photosynthesis among Australian wheat lines</i>		Dr Eleonora Egidi, Postdoctoral Research Fellow Western Sydney University <i>Resistance and resilience of managed and unmanaged soil bacterial communities to pulse disturbances</i>	Dr Holly Kirk, RMIT University (presented by Kirsten Parris) <i>Caring for wild commuters: applying ecological connectivity in urban planning</i>  SPEED TALK: Dr Elodie Camprasse, Deakin University <i>Using wildlife incident reports to inform biodiversity sensitive urban design in Victoria</i>
	Philippa Alvarez, Student, University of Technology Sydney <i>The Hitchhiker's Guide to Post-Heatwave Seed Germination: Don't Panic!</i>  SPEED TALK: Arun Singh Ramesh, PhD Student, James Cook University <i>Leaf thermoregulation among congeners across elevation gradients from wet tropical rainforests of Far North Queensland</i>	11:10-11:45 LIVE DISCUSSION: Indigenous Ecological Knowledge 10 <sup>th</sup> Anniversary Symposium	SPEED TALK: Justin Chan, UNSW <i>Complex environments alter competitive dynamics in fungi</i>  Dr Christina Birnbaum, Research Fellow, Deakin University <i>Above- and belowground impacts of an invasive species vary across landscapes</i>	SPEED TALK: Emma Henderson, Griffith University <i>The plant communities of urban riparian areas</i>  SPEED TALK: Claire Kenefick, Msc (Ecosystem Science) Student, University of Melbourne <i>Give them a shrubbery! Using Australian shrubs in naturalistic plantings to green our cities</i>

	SPEED TALK: Dr Manuel Esperon, Postdoctoral Research Fellow, Western Sydney University <i>Vulnerability of urban trees to heatwaves</i>			
	11:45-12:00 LIVE QA with all presenters		11:45-12:00 LIVE QA with all presenters	11:45-12:00 LIVE QA with all presenters
12:00 – 14:00	Take a break (Monday) Virtual Exhibition open 12:00-14:00			
12:15 – 13:45	Post Graduate Session <i>Facilitated by Adrienne Nicotra and Susanna Venn</i>			
12:30 – 13:30	Networking – Diversity at ESA <i>Facilitated by Ayesha Tulloch and James Barker</i>			
12:30 – 13:30	Lunchtime Discussion 1: Teaching ecology in unusual times <i>Facilitated by Jodi Price and Dieter Hochuli</i>			
14:00 – 15:30	CONCURRENT SESSIONS 2			
	SYMPOSIUM: Temperature Extremes: impacts, resilience and mitigation (Thermal Extremes) CHAIR: Adrienne Nicotra	SYMPOSIUM: Managing a cultural landscape and building resilience in a new world reality CHAIR: Noel Preece	OPEN FORUM: Speed Talks (1) CHAIR: Joshua Buru	OPEN FORUM: Global Ecology CHAIR: Bek Christensen
	Elizabeth Morison, University of Wollongong <i>Understorey shrub has improved resilience but suffers under compounded extreme heat and drought in summer</i>	Dr Emma Woodward, Research Scientist, CSIRO <i>Why is Indigenous knowledge important to Indigenous people? Learnings from Our Knowledge Our Way Guidelines</i>	SPEED TALK: Lachlan Wilmott, Threatened Species Officer, Department of Planning, Industry and Environment <i>Koala home range size and chlamydia disease expression correlated with soil fertility</i> SPEED TALK: Professor Nigel Andrew, Professor of Entomology, University of New England <i>Publication trends in Austral Ecology</i> SPEED TALK: Alexandra Catling, PhD Candidate, University of Queensland <i>Disentangling the effects of water availability and biotic interactions on annual plant performance</i>	Professor Sally A. Power, Professor, Western Sydney University <i>Understanding grassland species' responses to climate extremes: the PACE project</i>
	Dr Ganesha Liyanage, Rainforest Conservation Scientist, Australian Plantbank <i>Effect of increased temperature and drought conditions on early seedling stages of Geijera parviflora</i>	SPEED TALK: Simon Tedder, Dept. Planning Industry & Environment <i>Poetry in First Languages is saving the glossy black-cockatoo</i> Michelle McKemey, Principal, Melaleuca Enterprises Environmental Consultancy Services and Auntie Lesley Patterson, Banbai Elder and Ranger	SPEED TALK: Suman Acharya, PhD Student, La Trobe University <i>Dissolved organic matter dynamics and ecosystem metabolism in a regulated and unregulated river of Australia</i> SPEED TALK: Dr Alfonsina Arriaga Jiménez, Postdoctoral Fellow, University of New England	Dr Daniel Falster, ARC Future Fellow, University of New South Wales <i>Global bimodality of forest heights: natural or man-made phenomenon?</i>

		<i>Developing cross-cultural knowledge ('right way' science) to support Indigenous cultural fire management</i>	<i>Native dung beetle species richness and composition along an elevation gradient, ecosystem functioning and services</i>  SPEED TALK: Bryony Palmer, PhD Student, University of Western Australia <i>Investigations into the role of Australian marsupials as seed dispersers</i>	
	Lena Alice Schmidt, Hawkesbury Institute for the Environment, Western Sydney University <i>Warming alters floral resource provisioning in a critically endangered woodland community</i>	Robyn Boldy, PhD Candidate, The University of Queensland <i>Assessing Ecosystem Services and Biodiversity in a Culturally Diverse Mining Landscape</i>	SPEED TALK: Yolanda Hanusch, HDR Student, The University of Sydney <i>Crops, weeds, and exotic insectary plants: beyond introduced bee benefits?</i>  SPEED TALK: Dr Matt Hill, CSIRO <i>Serial replacement of tench (Tinca tinca) by common carp (Cyprinus carpio) investigated through hierarchical modelling</i>	Dr Ning Dong, Macquarie University <i>Global controls of leaf nitrogen</i>
	Vaibhav Dagg, Master of Research Candidate, Western Sydney University <i>Differential gene expression under drought between two widespread Eucalyptus species suggests unique adaptive abilities</i>	Aunty Marilyn Nicholls <i>How should we (Dja Dja Wurrung) engage western science to support Women's knowledge</i>	SPEED TALK: Cassandra Kalafatakis, Honours Student, La Trobe University <i>Associational Refuge Promotes Short-Term Seedling Survival in Coast Banksia</i>  SPEED TALK: Lorena Pinheiro Silva, PhD Student, Federal University of Santa Catarina <i>Grazing efficiency asymmetry drives zooplankton top-down control in a subtropical lake dominated by non-toxic cyanobacteria</i>	Dr Jodi Price, Senior Lecturer in Ecology, Charles Sturt University <i>Herbivore exclusion effects on plant diversity depend on rainfall and evolutionary history</i>
	Manjunatha Chandregowda, PhD Student, Hawkesbury Institute for the Environment <i>Warming and drought reduce belowground productivity and alter root traits in a model pasture grass</i>	Nathan Wong <i>Engaging with Government to deliver self-determination</i>	SPEED TALK: Miranda Rew-Duffy, The University of Queensland <i>Comparing the abundance and diversity of small vertebrates between a conservation reserve and surrounding farmland</i>  SPEED TALK: Louise Gill, Honours Student, Griffith University <i>Values of ecosystem service provision for non-commercial fishing in the Mitchell Catchment</i>	Dr Tanzeel Javaid Aini Farooqi, Ex-phd Student, Beijing Forestry University, China <i>Hydrological legacy of forest harvesting intensity on streams: a global synthesis</i>  SPEED TALK: Jonathon Mifsud, Masters, Macquarie University <i>Explorations of the plant virosphere</i>
	Dr Renée Marchin Prokopavicius, ARC DECRA Fellow, Western Sydney University <i>Urban tree responses to heat and drought: which species can survive future climate conditions?</i>	Daniel May, Australian National University <i>Fire and Politics: What a Typology of Indigenous Burning Discourses Reveals</i>	SPEED TALK: Jessica Keem, Masters Student, The University of Melbourne <i>Fowl play in the Mallee: evaluating fox density at malleefowl adaptive management sites</i>	Andrew Marshall, Associate Professor / ARC Future Fellow, University of the Sunshine Coast

	Bradley Posch, PhD Candidate, The Australian National University <i>Night warming is more influential than daytime warming and heatwaves in driving wheat respiratory acclimation</i>		SPEED TALK: Malaika Chawla, Student, James Cook University <i>Investigating the determinants of the red fox (Vulpes vulpes) range limits in North Queensland</i>	<i>Forest resilience to global liana proliferation: Emerging findings from the pantropical FoRCE experiment</i>
	SPEED TALK: Rosalie Harris, PhD Candidate, Australian National University <i>Vulnerability of marine plants to extreme temperature events: a mechanistic approach</i>  SPEED TALK: Dr Samiya Tabassum, Post Doctoral Research Fellow, Macquarie University <i>Angriest summer on record: assessing plant responses and economic costs of an extreme climatic event</i>			
	15:45-15:55 LIVE QA with all presenters	15:20-15:30 LIVE QA with all presenters	15:20-15:30 LIVE QA with all presenters	15:30-15:40 LIVE QA with all presenters
15:30 – 16:00	Afternoon refresh break (Monday)			
16:00 – 17:45	CONCURRENT SESSIONS 3			
	SYMPOSIUM: Temperature Extremes: impacts, resilience and mitigation (Animals / Management and mitigation) CHAIR: Pieter Arnold	OPEN FORUM: Wildlife Ecology CHAIR: April Reside	Open Forum: Methods and Monitoring (1) CHAIR: Daniel Falster	
	Caitlin Smith, Marine Species Conservation Officer, WWF-Australia <i>Trialling seawater as an effective sand cooling method to combat feminisation in green turtles</i>	Maquel Brandimarti, PhD Candidate, The University of Sydney <i>Does testosterone alter spatial area use and make male kangaroos more vulnerable to parasites?</i>	Professor Jim Hone, Emeritus Professor, University of Canberra <i>rm: estimation of an extreme parameter and future applications</i>	
	Associate Professor Craig Nitschke, University of Melbourne <i>Climate change drives habitat contraction of a nocturnal arboreal marsupial at its physiological limits</i>	Dr Galen Holt, Deakin University <i>Characteristics and consequences of an emerging disease in caddisflies</i>	Dr Robyn Shaw, Postdoctoral Research Fellow, Murdoch University <i>Genomics, remote sensing and conservation prioritisation: tools for supporting resilient mammal communities in multi-use landscapes</i>	
	Michael Callan, Founding Director, Habitech Pty Ltd <i>Thinking outside the box: a novel nest box design with improved thermal properties</i>	Courtney Melton, PhD Candidate, The University of Queensland <i>The jury is out on lethal control of noisy miners to benefit vulnerable woodland birds</i>	Dr Ali Chauvenet, Lecturer, Griffith University <i>Economic value of parks via mental health benefits</i>	
	Patrice Pottier, PhD Student, The University of New South Wales <i>Sex differences in thermal acclimation across ectothermic animals: a meta-analysis</i>	Emma Dale, Dphil Student, Zoology Department Oxford University <i>Understanding cyclic dynamics in a community of wild rodents</i>	Dr Steph Courtney Jones, Research Assistant, Australian National University <i>IDEAcology: Using expert judgement to inform ecological and conservation decision making</i>	

	<p>SPEED TALK: Claire Mason, PhD Student, University of Tasmania <i>Local weather, microclimate and nest-scale drivers of shy albatross chick mortality and breeding success</i></p> <p>SPEED TALK: Claire Sives, PhD Candidate, UNSW <i>Regarding the impacts of climate change on dryland ecology</i></p>	<p>SPEED TALK: Alex Jiang, PhD Student, University of Queensland <i>The development of an improved scat survey method for koalas <i>Phascolarctos cinereus</i></i></p>	<p>SPEED TALK: Dr Zach Brown, Senior Technical Officer, Australian National University <i>The Australian Mountain Research Facility</i></p> <p>SPEED TALK: Professor Jenny Davis, Co-director, Research Institute For Environment &amp; Livelihoods, Charles Darwin University <i>Ecological outreach via social media: responses to remote waterhole camera images indicate that dingoes rule!</i></p>
	<p>Dr Ryan Tangney, University of New South Wales <i>How seed traits define seed fates in fire-prone ecosystems</i></p>		<p>SPEED TALK: Eric Vanderduys, Research Officer, CSIRO Grey-headed flying-fox monitoring</p> <p>SPEED TALK: Dr Maria Cardoso, Manager Biodiversity Conservation And Research, VicForests <i>Monitoring species presence and persistence to inform best-practise biodiversity management of timber harvesting operations</i></p>
	<p>Dr Daniel Montesinos, Senior Research Fellow, Australian Tropical Herbarium – James Cook University <i>What common-garden experiments tell us about climate responses in invasive plants</i></p>		<p>Simone Stevenson, PhD Candidate, Deakin University <i>Testing for consensus amongst global biodiversity indicators</i></p>
	17:35-15:45 LIVE QA with all presenters	17:35-15:45 LIVE QA with all presenters	17:35-15:45 LIVE QA with all presenters
18:00 – 18:45	ESA AGM		
19:00 – 20:00	ESA Queer Mixer Facilitated by Adam Frew and James Barker		

## Tuesday 1 December 2020

8:00-8:45	International Networking Breakfast
9:00 – 10:00	PLENARY SESSION TWO Chair: Jodi Price
	<p>Keynote presentation: ESA Next Generation Ecologist Award presentation: Laura Brannelly <i>Understanding how some frogs coexist with disease: exploring changes in reproduction as a mechanism of population persistence</i></p>
10:00 – 12:00	CONCURRENT SESSIONS 4

	<p>SYMPOSIUM: Perspectives on a changing landscape of fire (1) CHAIR: James Barker</p>	<p>SYMPOSIUM: Behavioural response to ecological challenges (1) CHAIR: Caitlyn Forster</p>	<p>OPEN FORUM: Restoration Ecology CHAIR: Daniel Falster</p>	<p>Open forum: Species Distribution CHAIR: Bek Christensen</p>
	<p>Professor Alan Andersen, Charles Darwin University <i>Faunal responses to fire in Australian tropical savannas: lessons from field experiments</i></p>	<p>Lily Bentley, University of Cambridge <i>Habitat preferences in sympatry and allopatry of two closely-related albatross species</i></p>	<p>Jennifer O'Meara, Parklands Ecologist, Sydney Olympic Park Authority <i>Restoring the restoration: bringing back woodland birds</i></p>	<p>Eleanor Hay, Monash University <i>Geographic range size and speciation in honeyeaters</i></p>
	<p>SPEED TALK: Nathan Anderson, Student, Kings Park Science, and Murdoch University <i>Ecophysiological mechanisms underpinning resilience to climate change in the Northern Jarrah Forest (Western Australia)</i></p> <p>SPEED TALK: Matthew Chard, PhD Candidate, Australian National University <i>Wallabies and wildfire: how fauna and fire interact to shape coastal vegetation communities</i></p> <p>SPEED TALK: Professor Don Driscoll, Deakin University <i>How does fire interact with habitat fragmentation?</i></p>	<p>SPEED TALK: Abhilasha Aiyer, Honours Candidate, The University of Sydney <i>Once bitten twice shy: Using Taste Aversion to protect wild Freshwater Crocodiles from Cane toads</i></p> <p>SPEED TALK: Sydney Collett, PhD Student, Charles Darwin University <i>Sympatric finches use different foraging strategies to overcome resource limitations</i></p>	<p>Peta Zivec, Griffith University <i>Patterns and drivers of natural regeneration on abandoned cropping fields in the Northern-Murray Darling Basin</i></p>	<p>Max Mallen-Cooper, PhD Student, University of New South Wales <i>Peeking into the future of lichens and mosses with global species distribution models</i></p>
	<p>Associate Professor Tina Bell, University of Sydney <i>Prescribed burning for multiple objectives – the case for carbon and water</i></p>	<p>SPEED TALK: Cassie Speakman, PhD Candidate, Deakin University <i>Temporal and spatial influences on foraging behaviour and hunting success in female AUFS</i></p>	<p>Dr Amanda Freeman, Nature North <i>Comparing Biodiverse Tree-planting and Pasture Conversion Costs in the Wet Tropics Uplands</i></p>	<p>Amy Tims, Macquarie University <i>Predicting distribution shifts in Australian freshwater fishes due to climate change</i></p>
	<p>SPEED TALK: Hannah Etchells, The University of Western Australia <i>Mega-fires, indicator species and indicator guilds: understanding post-fire ecosystem regeneration across kingdoms</i></p> <p>SPEED TALK: Dr Diana Kuchinke, Sessional Lecturer, Federation University <i>Prescribed burn severity has minimal effect on common bird species in a fire-prone forest ecosystem</i></p> <p>SPEED TALK: Sarah McColl-Gausden, PhD Candidate, The University of Melbourne <i>Assessing immaturity risk to alpine ash forests under climate change and future fire regimes</i></p>	<p>SPEED TALK: Ettore Camerlenghi, Monash University <i>The multilevel society of a cooperatively breeding songbird</i></p> <p>Caitlyn Forster, PhD Candidate, The University of Sydney <i>Testing the impact of Phantom Alternatives on floral choice by Bumblebees, <i>Bombus impatiens</i></i></p>	<p>Brittany Elliott, PhD Candidate, University of The Sunshine Coast <i>Identifying spatial drivers of plant assemblage structure and complexity to prioritise restoration and rehabilitation actions</i></p>	<p>Laura Town-Hopkinson, Masters Student, The University of Melbourne <i>Understanding the key disturbances driving bandicoot distribution in south-west Victoria</i></p>
	<p>Professor Mike Clarke, La Trobe University <i>Understanding the drivers is crucial to envisaging the future for semi-arid Murray Mallee woodlands</i></p>	<p>Dr Mylene Mariette, Deakin University <i>Coping with heat and competition: songbird embryos cue on sounds in the nest</i></p>	<p>Dr Sue Baker, Research Fellow, University of Tasmania <i>Environmental and biotic drivers of plant and animal succession following timber harvesting</i></p>	<p>Dr Richard Segal, PhD Candidate, Charles Sturt University</p>

				<i>Small-scale species distribution model identifies restricted breeding habitat for an endemic island bird</i>
	Andrew Denham, Senior Research Scientist, Dept Planning, Industry & Environment NSW <i>Temporal dynamics of plant populations after fire: a tale of Acacias with contrasting life histories</i>	Dr Tim Doherty, DECRA Fellow, University of Sydney <i>Human disturbance causes widespread disruption of animal movement</i>	Andrew O'Reilly-Nugent, Climate Friendly <i>How does ecological thinning affect the development of regenerating mulga forests?</i>	
	SPEED TALK: Dr Josh Whittaker, University of Wollongong <i>Please tell me your story: Community experiences of bushfire</i>	Samantha Wallace, The University of Newcastle <i>Between bedrock and a hard place: discovering the impact of longwall-mining on Littlejohn's tree frog</i>	SPEED TALK: Nathali Machado de Lima, Research Associate, UNSW <i>Improving restoration of native plant communities in drylands with biocrust cyanobacteria</i>	Jarrod Sopniewski, Honours Student, Australian National University <i>The future of frogs: predicting the impacts of a changing climate on Australian anurans</i>
			SPEED TALK: Catherine Bowler, PhD Candidate, University of Queensland <i>Restoration through a coexistence lens</i>	
	Julianna Santos, PhD Candidate, The University of Melbourne <i>A synthesis of fire-driven declines of threatened mammals in Australia</i>		Dr Michelle Gibson, Post-doctoral Researcher, The University of Queensland <i>Restoring for resilience: replanting and grazing exclusion benefit birds in Australia's south-east temperate woodlands</i>  SPEED TALK: Katharine Hogan, University of Nebraska-Lincoln <i>Inter-decadal plant richness and diversity is persistent and consistent across high-diversity grassland restorations in a patch-burned landscape</i>	
	11:55-12:05 LIVE QA with all presenters	11:55-12:05 LIVE QA with all presenters	11:55-12:05 LIVE QA with all presenters	11:35-11:45 LIVE QA with all presenters
12:05 – 14:00	Take a break (Tuesday) Virtual Exhibition open 12:00-14:00			
12:10 – 14:00	Lunchtime workshop 3. Early Career Ecology: How do you write a job application during a pandemic? So glad you (m)asked... <i>Facilitated by Stephanie Courtney-Jones and Leanda Mason</i>			
12:30 – 13:30	Lunchtime workshop 2. Sharing your data through TERN Data Infrastructure <i>Facilitated by Siddeswara Guru and Jenny Mahuika</i>			
14:00 – 15:30	CONCURRENT SESSIONS 5			



	<p>SYMPOSIUM: Perspectives on a changing landscape of fire (2) CHAIR: Heather Simpson</p>	<p>SYMPOSIUM: Behavioural response to ecological challenges (2) CHAIR: Caitlyn Forster</p>	<p>OPEN FORUM: Marine and Freshwater CHAIR: John Morgan</p>	<p>OPEN FORUM: Conservation Biology (1) CHAIR: Don Driscoll</p>
	<p>SPEED TALK: Craig Welden, Qld Fire &amp; Biodiversity Consortium, Healthy Land &amp; Water <i>Cross-tenure Collaborative Fire Management: Building Capacity and Healthy Landscapes</i></p> <p>SPEED TALK: Fred Rainsford, La Trobe University <i>How does prescribed fire shape bird and plant communities in a temperate dry forest ecosystem?</i></p>	<p>Sarah Stock, PhD Candidate, University of Newcastle <i>Nightlife of a threatened frog: Molecular pedigree uncovers cryptic behaviours in Litoria Littlejohni</i></p>	<p>Dr Murtada Naser, University of Basrah <i>Environmental factors as drivers for species distribution of the freshwater crabs in the Tigris-Euphrates basin</i></p>	<p>Associate Professor Noel Preece, Director, Biome5 Pty Ltd <i>Legislative snooker – Red Lists and national laws provide only rhetorical protection to threatened species</i></p>
	<p>SPEED TALK: Katharine Senior, PhD Candidate, The University of Melbourne <i>A field experiment to test how mammals and reptiles respond to characteristics of planned burning</i></p> <p>SPEED TALK: Harriet Simpson-Southward, PhD Candidate, University of Wollongong <i>Effects of climate change on resilience of fire prone eucalypt communities</i></p>	<p>SPEED TALK: Dr Lizzy Lowe, Postdoctoral Researcher, Macquarie University <i>Spider brain size and behaviour in cities</i></p> <p>SPEED TALK: Andrew Schwenke, PhD Candidate, Queensland University of Technology <i>Evolution of acoustic communication in two species of frogs in the Litoria lesueuri species group</i></p>	<p>Yi-Yang (Alex) Chen, PhD Candidate, The Australian National University <i>Seasonality of epifaunal secondary production in a fringing reef, and its sensitivity to changing climate</i></p>	<p>Tahlia Townsend, Deakin University <i>The population ecology and behaviour of eastern barred bandicoots following conservation translocations</i></p>
	<p>SPEED TALK: Dr Rachael Nolan, Lecturer, Hawkesbury Institute for the Environment, Western Sydney University <i>The role of bark attributes and drought in fire resistance in resprouting tree species</i></p> <p>SPEED TALK: Christopher Pocknee, PhD Candidate, University of Queensland <i>Saving an endangered bettong with fire</i></p> <p>SPEED TALK: Simin Rahmani, PhD Student, University of Wollongong <i>Effects of 38 years of wildfires on tree density in the Blue Mountains, Australia</i></p>	<p>SPEED TALK: Natalie Freeman, PhD Candidate, University of Queensland <i>Hey neighbour! Kin-based social interactions in an asocial solitary marsupial, the northern quoll (Dasyurus hallucatus)</i></p> <p>SPEED TALK: Richard McLellan, PhD Student, Charles Sturt University <i>Parasitic shrubs provide important ecological processes for fauna in Australia's rangeland ecosystems</i></p> <p>SPEED TALK: Renae Kirby, University of Wollongong <i>Digging Deeper: Investigating Temperature Effects on the Behaviour of the Burrowing Mud Shrimp, Trypaea australiensis</i></p>	<p>Catheline Froehlich, PhD Fellow, University of Wollongong <i>Who will recover: extreme climatic events affect habitat use and persistence of coral-dwelling fishes</i></p>	<p>Associate Professor Heloise Gibb, Associate Professor, La Trobe University <i>Experimental evidence for ecological cascades following threatened mammal reintroduction</i></p>
	<p>SPEED TALK: Eliza Thompson, Masters Student, The University of Melbourne <i>Flying in the face of fire: the influence of fire edges on mallee birds</i></p>	<p>Vanessa Gorecki, Queensland University of Technology <i>Landscape use in an urban environment by a trawling bat, the large-footed Myotis (Myotis macropus)</i></p>	<p>Matthew Kerr, Macquarie University <i>A Latitudinal Gradient in Australian Marine Bivalves Revealed by a Large Field Survey</i></p>	<p>Dr Jessica Walsh, Lecturer, Monash University <i>Evidence-based conservation for Australian woodland birds: a systematic review</i></p>
	<p>SPEED TALK: Alexandria Thomsen, UNSW <i>Season of fire impacts flowering in Lambertia Formosa</i></p>	<p>SPEED TALK: Lorenzo Galletta, PhD Candidate, Deakin University</p>	<p>Charles Hinchliffe, PhD Candidate, UNSW</p>	<p>Gavin Trewella, PhD Candidate, Charles Darwin University</p>

	SPEED TALK: Saumya Wanniarachchi, PhD Student, University of Melbourne <i>Using e-DNA to better understand the effect of fire on the diets of small mammals</i>	<i>Embryonic strategies for surviving heatwaves: evidence of heat shock proteins in zebra finches</i>	<i>A novel approach for estimating growth and mortality of fish larvae across fine scales</i>	<i>Habitat preference by northern quolls and feral cats in savanna woodlands</i>
	SPEED TALK: Lily Wheeler, Master Student, The University of Melbourne <i>How does extent, configuration and diversity of fires shape mammal populations in heathy woodland ecosystems?</i>  SPEED TALK: Andy Wiechnik, University of Sydney <i>Near-term decision tree for fire management using trends in degradation condition scores for threatened ecosystems</i>  SPEED TALK: Jane Williamson, PhD Candidate, Australian Catholic University <i>Location is a better predictor of time since fire than vegetation type</i>	Dr Graham Fulton, Perspectives Editor Pacific Conservation Biology, University of Queensland <i>Nest ecology in the context of an intact community: a provocative synthesis of knowledge from Dryandra</i>		
	SPEED TALK: Dr Mengran Yu, University of Sydney <i>Detecting the effects of Prescribed burning using generalised additive modelling</i>			
	15:30-15:40 LIVE QA with all presenters	15:18-15:30 LIVE QA with all presenters	15:18-15:30 LIVE QA with all presenters	15:18-15:30 LIVE QA with all presenters
15:30 – 16:00	Quick refresh break (Tuesday)			
16:00 – 17:45	CONCURRENT SESSIONS 6			
	OPEN FORUM – Methods and Monitoring (2) CHAIR: Sacha Jellinek	SYMPOSIUM Approaches for detailing threats, actions and management costs for threatened species recovery across broad scales CHAIR: James Watson	OPEN FORUM: Functional Ecology CHAIR: Dan Falster	
	Kevin Newman, Student, University of Melbourne <i>Optimal Surveillance Methods</i>	Dr Josie Carwardine, Research Scientist, CSIRO <i>Knowledge synthesis to guide large-scale species recovery: why we need it and where we're at?</i>	Shubham Chhajed, PhD Candidate, Macquarie University Hydraulic drivers of photosynthetic variation among co-occurring species using an optimality approach	
	Zoe Xirocostas, PhD Student, UNSW Sydney <i>The ZAX herbivory trainer – new software for training researchers to visually estimate leaf damage</i>	Michelle Ward, University of Queensland <i>What threatens Australian biodiversity and how do we assist recovery after catastrophic fires?</i>	Mark Westoby, Macquarie University <i>Trait-dimensions of ecological strategy in bacteria and archaea compared to vascular plants</i>	
	Rebecca Rogers, Charles Darwin University	Professor Helene Marsh, Emeritus Professor, James Cook University	Rose Brinkhoff, PhD Student, University of Tasmania	

	<i>Testing the capacity of weather radar-based bird monitoring to improve waterbird management</i>	<i>A new framework for biodiversity threat abatement in Australia</i>	<i>Nitrogen fertiliser increases LAI but creates carbon and water costs in Eucalyptus nitens</i>
	Dr Georgia Dwyer, Senior Research Assistant, Deakin University <i>Capturing geomorphological patterns in ecological resources: fractal dimensions describe fluvial rock distributions</i>	CJ Yong, Research Assistant, University of Queensland <i>How to save the world without knowing how much it costs?</i>	Hannah Carle, PhD, Research School of Biology, ANU <i>Applying functional traits to predict vital rates of trees in a Bornean rainforest restoration landscape</i>
	Dr Martin Westgate, Science Advisor, Atlas of Living Australia / CSIRO <i>Improving the Atlas of Living Australia for ecological researchers</i>	Dr April Reside, Postdoctoral Research Fellow, The University of Queensland <i>A knowledge synthesis to inform a national approach to fighting extinction</i>	Baptiste Wijas, PhD Candidate, University of New South Wales <i>The functional role of termites along macro-climatic gradients</i>
	Dr Rebecca Lester, Associate Professor, Freshwater Ecology, Deakin University <i>Explaining species diversity in a fractal world</i>	Billy Geary, PhD Student, Department of Environment, Land, Water & Planning <i>Lessons from implementing a spatial conservation action planning tool in Victoria, Australia</i>	Dr Andrea Westerband, Postdoc, Macquarie University <i>Soil and climate properties jointly influence leaf traits in native Australian species</i>
	SPEED TALK: Ana Gracanin, PhD Candidate, University of Wollongong <i>Animal selfies: Can sugar glider density be estimated through camera trapping?</i>	Dr Micha Jackson, Post Doctoral Research Fellow, The University of Queensland <i>The Australian Threatened Species Index: Inaugural Threatened Plant Index and Future Directions</i>	Dr Yuki Tsujii, Postdoctoral Research Fellow, Macquarie University <i>Roles of leaf phosphorus fractions in phosphorus-use efficiency for 12 coexisting NSW woody species</i>
	SPEED TALK: Giancarlo Chiarenza, PhD Student, UNSW <i>Barking up the wrong tree – are ecologists studying the correct aspects of soil quality?</i>  SPEED TALK: Dr Kate Watermeyer, Research Fellow, Deakin University <i>How do biodiversity indicators behave across different ecoregions?</i>		SPEED TALK: Dony Indiarito, PhD Student, University of New South Wales <i>An eco-evolutionary model for trait-based community assembly along an environmental gradient</i>
	17:40-17:50 LIVE QA with all presenters	17:40-17:50 LIVE QA with all presenters	17:40-17:50 LIVE QA with all presenters
18:00 – 19:30	Barbara Rice Memorial Poster Session		

### Wednesday 2 December 2020

9:00 – 10:00	PLENARY SESSION THREE Chair: Daniel Falster
	Keynote presentation: Dr Belinda Medlyn <i>Climate change and the Australian vegetation: where are we headed?</i>

10:00 – 12:00				
CONCURRENT SESSIONS 7				
	<p>SYMPOSIUM: Ecological Extremes in Antarctica, mechanisms of resilience and recovery CHAIR: Diana King</p>	<p>SYMPOSIUM: Windows into resilience and recovery: technological advances and the acquisition of data in ecological systems (1) CHAIR: Andy Davis</p>	<p>SYMPOSIUM: Citizen Science: a tool for ecology, conservation and science communication (1) CHAIR: Katie Irvine</p>	<p>SYMPOSIUM: Tree dieback in Australian Ecosystems (1) CHAIR: Matthew Brookhouse</p>
	<p>Dr Dana M. Bergstrom, Principal Research Scientist, Australian Antarctic Division <i>Global environmental pressures on terrestrial biodiversity in the Vestfold Hills, East Antarctica</i></p>	<p>Wilma Karsdorp, University of Queensland Developing robust data management for ecosystem images</p>	<p>Professor Kirsten Parris, Associate Professor, The University of Melbourne <i>The CAUL Urban Wildlife App: Engaging citizen scientists with nature in the city</i></p>	<p>Dr Katinka Ruthrof, Forest Ecologist, DBCA <i>Cross-scale investigation of declining forest cover in southwestern Australia</i></p>
	<p>Dr Jasmine Lee, Monash University <i>Conserving Antarctic biodiversity with priority threat management</i></p> <p>SPEED TALK: Alison Haynes, PhD Candidate, University of Wollongong <i>From CBD to glacier edge: moss colonisation and climate change</i></p>	<p>SPEED TALK: Allison Broad, PhD Candidate, University of Wollongong <i>Remote Technologies reveal Wollongong's sponge gardens: classification approaches for diversity and ecological assessments</i></p> <p>SPEED TALK: Brittany Hayward-Brown, Honours Student, Charles Darwin University <i>Automated radio telemetry data informs wildlife management practices aimed at the recovery of threatened species</i></p>	<p>Dr Aaron Greenville, Lecturer, University of Sydney <i>Too little or too much data: citizen scientists may have the answer</i></p>	<p>Professor Giles Hardy, Professor Forest Pathology, Murdoch University <i>Understanding the causes of Eucalyptus rudis decline in southwestern Australia</i></p>
	<p>SPEED TALK: Shae Jones, Research Assistant, University of Wollongong <i>Current state of Antarctic biodiversity monitoring</i></p>	<p>Professor Andy Davis, University of Wollongong <i>Aerial surveillance as an ecological tool; data collection with blimps in the wave-swept coastal zone</i></p>	<p>Dr Clare Hawkins, Bookend Trust, University of Tasmania <i>Mission: long-term, state-wide population monitoring of the Tasmanian wedge-tailed eagle (Aquila audax fleayi)</i></p>	<p>Dr Paul Rymer, Western Sydney University <i>Variation in xylem vessel plasticity associated with climate-origin provides adaptive capacity to drought</i></p>
	<p>SPEED TALK: Isabella Todd, University of Wollongong <i>Challenges of monitoring Antarctic lichen communities using photo digitisation</i></p>	<p>Vinod Jacob, PhD Candidate, Western Sydney University <i>Leaf hydraulic vulnerability and gas exchange strategies of pasture species under drought</i></p>	<p>Dr Katharine Haynes, University of Wollongong <i>How citizen science promotes and is enriched by connection to place</i></p>	<p>Dr Jen Peters, Postdoc, Oak Ridge National Lab, TN USA <i>What is the threat of drought-induced hydraulic failure in Australian forests?</i></p>
	<p>Dr Diana King, Research Officer, Global Challenges Program, University of Wollongong <i>Monitoring East Antarctic vegetation in a time of change</i></p>	<p>Anna Giles, PhD Student, Southern Cross University <i>Combining drones and machine learning technology for rapid coral reef health assessment</i></p>	<p>Dr Birgita Hansen, Federation University <i>What characterises successful citizen science? A comparison of community-based freshwater and shorebird monitoring</i></p>	<p>Kate Johnson, PhD Student, University of Tasmania <i>How the pipes fail: xylem failure spreads by single-conduit embolisms in three dry-forest angiosperm stems</i></p>
	<p>Dr Melinda Waterman, Associate Research Fellow, University of Wollongong</p>	<p>Jacinta Holloway Brown, Postdoctoral Fellow, QUT <i>A machine learning method for detecting forest change events and interpolating missing satellite image data</i></p>	<p>Dr Alex Kusmanoff, RMIT University <i>Tips for designing environmental engagement programs</i></p>	<p>Victoria Pérez Martínez, Phd Student, Hawkesbury Institute for Environment</p>

	<i>Old-growth moss forests as proxies for microclimates in coastal Antarctica</i>			<i>Can we explain eucalypt drought vulnerability from species climate-origin and life-history traits?</i>
		Lachlan Howell, PhD Candidate, The University of Newcastle <i>Is drone technology the cost-effective solution for koala monitoring?</i>	Dr Sheryn Pitman, Program Manager Inspiring South Australia, Inspiring South Australia The contribution of citizen science in building ecological literacy	Dr Samuel Hislop, NSW Department of Primary Industries <i>Quantifying the spatial extent of the 2018-19 drought on canopy health in NSW north-coast forests</i>
		Yogendra Karna, School of Ecosystem and Forest Sciences <i>Fuel structure responses to severe wildfire in mixed eucalypt forests: implication for flammability</i>	Dr Erin Roger, Citizen Science Program Lead, CSIRO Using citizen science to enable meaningful participation in bushfire recovery	SPEED TALK: Anne-Cecile Colin, PhD Candidate, Western Sydney University – Hawkesbury Institute for the Environment <i>Adaptive capacity to climate change: Genomic underpinnings of drought tolerance in threatened eucalyptus species</i>
	11:30-12:00 LIVE DISCUSSION	11:45-11:55 LIVE QA with all presenters	11:50-12:00 LIVE QA with all presenters	11:50-12:00 LIVE QA with all presenters
12:00 – 14:00	Take a break (Wednesday) Virtual Exhibition open 12:00-14:00			
12:10 – 13:50	Lunchtime workshop 4. Sci-what?! How to communicate your science effectively <i>Facilitate by Euan Ritchie and Jen Martin</i>			
12:30 – 13:30	Lunchtime workshop 5. ecoEd – training for next generation researchers and practitioners in ecological and environmental problem solving <i>Facilitated by Elisa Bayraktarov and Jenna Wraith</i>			
14:00 – 15:30	CONCURRENT SESSIONS 8			
	SYMPOSIUM: Wetland management and restoration in human-dominated landscapes CHAIR: Jayne Hanford	SYMPOSIUM: Windows into resilience and recovery: technological advances and the acquisition of data in ecological systems (2) CHAIR: Allison Broad	SYMPOSIUM: Citizen Science: a tool for ecology, conservation and science communication (2) CHAIR: Ayesha Tulloch	SYMPOSIUM: Tree dieback in Australian Ecosystems (2) CHAIR: Kate Johnson
	SPEED TALK: Jayne Hanford, PhD Student, The University of Sydney <i>Improving environmental and human health by integrating urban wetland and mosquito research</i> SPEED TALK: Dr Nina McLean, Monitoring and Evaluation Officer, Conservation Research ACT Government <i>Restoration success of Sphagnum Bogs after fire</i>	Asitha Samarawickrama, University of Melbourne <i>Are handheld thermal cameras effective for detecting threatened mammals in a semi-arid environment?</i> SPEED TALK: Sarah O’Hea Miller, University of Wollongong <i>Keeping up with the crayfish: Radio-tracking the movement patterns of native and invasive freshwater crayfish</i>	SPEED TALK: Peter West, Research Officer, NSW Department of Primary Industries <i>Citizen and community-group based surveillance of invasive species using FeralScan for improved pest management</i> SPEED TALK: Anne Eichholtzer, PhD Student, Deakin University <i>From natural to social sciences: the multiple values of Citizen Science</i>	Dr Matthew Brookhouse, Senior Lecturer, Australian National University <i>Snow-gum dieback—current knowledge and opportunities to gain unique insights to a widespread phenomenon</i>

	Dr Tanya Mason, Research Fellow, UNSW Sydney <i>Application of the mitigation hierarchy: a case study of underground mining impacts on peatland ecosystems</i>	SPEED TALK: Penelope Pascoe, University of Tasmania <i>Island ecosystem function recovery through an isotopic lens</i>	SPEED TALK: Maureen Thompson, PhD Candidate, UNSW <i>What signals time to breed? Citizen science reveals exogenous influences to frog calling across Australia</i>	Dr Stefan Arndt, The University of Melbourne <i>Landscape level assessment of tree drought mortality in forests of the Strathbogie Ranges in Australia</i>
	Dr Swapan Paul, Manager Wetlands, SOPA <i>Mangrove rehabilitation requires multifactorial and multidimensional thinking</i>	SPEED TALK: Caitlin Woods, PhD Candidate, University of Wollongong <i>Predicting patterns of biodiversity in the World Heritage listed Lord Howe Island Marine Park</i>  Alex Santiago, Honors Student, University of Melbourne <i>The influence of landscape-scale pattern on the genetic diversity of an Australian skink</i>	SPEED TALK: Larissa Braz Sousa, PhD Candidate, University of South Australia <i>e-entomology Citizen Science enhances mosquito surveillance in urban areas</i>	Jingyi Ding, PhD Student, University of New South Wales <i>Grow wider or thicker: variable response of woody plants to increasing dryness</i>
	Dr Kay Morris, Senior Scientist, Arthur Rylah Institute for Environmental Research, Department of Environment Land Water and Planning <i>Goldilocks and the three sheep and cows: Optimizing grazing for wetland biodiversity in agricultural landscapes</i>	Benjamin Wagner, PhD Candidate, The University of Melbourne <i>Gliding for gliders: Using commercial UAV and multispectral technology to identify greater glider foraging habitat</i>	SPEED TALK: Lauren Hook-Walker, Threatened Species Officer, Department of Planning, Industry and Environment <i>That Glossy looks familiar! – Photo identification of female Glossy black- cockatoos by citizen scientists</i>	Dr Carola Pritzkow, UTAS <i>Size and spatial positioning of embolized conduits under natural drought</i>
	Associate Professor Cameron Webb, University of Sydney <i>Urban estuarine wetlands and the challenges of managing mosquitoes of pest and public health importance</i>	Dr Debbie Saunders, Conservation Ecologist, CEO & Chief Remote Pilot, Wildlife Drones & ANU <i>Drones &amp; Wildlife: evaluating applications of drone technologies for ecological data collection</i>	SPEED TALK: Maree Treadwell, President / Ecologist, Bats and Trees Society of Cairns <i>Saving our Spectacled Flying-fox – citizen science project to engage communities in conserving Spectacled Flying-foxes</i>	Vanessa Tonet, University of Tasmania <i>Tree mortality: could genetic variation select for drought resistance in Eucalyptus viminalis?</i>
		Daniel Swadling, PhD Candidate, University of Wollongong <i>Fish and chips: tracking the movements of juvenile fish in a temperate marine park</i>	14:40-15:30 LIVE DISCUSSION	Dr Rebecca Jones, University of Tasmania <i>Recovering the gene pool of Eucalyptus morrisbyi following rapid dieback</i>
	15:20-15:30 LIVE QA with all presenters	15:30-15:40 LIVE QA with all presenters		15:20-15:30 LIVE QA with all presenters
15:30 – 16:00	Quick refresh break (Wednesday)			
16:00 – 18:00	CONCURRENT SESSIONS 9			

	<p>OPEN FORUM: Climate change and plants CHAIR: Jennifer Firn</p>	<p>SYMPOSIUM: Improving the adaptive potential of restored communities CHAIR: Marlien van der Werwe</p>	<p>OPEN FORUM: Fire Impacts CHAIR: Sam Lloyd</p>	<p>SYMPOSIUM: Tree dieback in Australian Ecosystems (3) CHAIR: Matthew Brookhouse</p>
	<p>Laura White, PhD Candidate, Southern Cross University <i>Climatic extremes add complexity to threatened species management: the impact of drought on Hairy Jointgrass</i></p>	<p>Dr Peter Harrison, Post-doctoral Research Fellow in Restoration Genetics, University of Tasmania <i>Provenancing strategies to enhance the adaptive potential of forest restoration plantings</i></p>	<p>Dr Orpheus Butler, Smithsonian Tropical Research Institute <i>Stoichiometry links biogeochemical and ecological responses of wet eucalypt forest to long-term fire regime</i></p>	<p>SPEED TALK: Associate Professor Brendan Choat, Western Sydney University <i>Tree dieback associated with the 2017-2020 drought in south-eastern Australia</i></p>
	<p>Chung-Huey Wu, PhD Candidate, University of Melbourne <i>Allocating permanent and temporary habitat conservation under uncertain climate change and land-loss</i></p>	<p>Kevin Bairos-Novak, James Cook University <i>Evolving to ecological extremes: A review and meta-analysis of heritability estimates in corals</i></p>	<p>Meghan Porteous, Master's Student, University of Melbourne <i>Wildfires, Flammable oils, and Eucalyptus trees: The persistence and volatility of terpenes in excised leaves</i></p>	<p>SPEED TALK : Jessica Ward-Jones, Masters Student, Australian National University <i>Dieback of snow gums in Perisher Valley, NSW: symptoms and drivers</i></p>
	<p>Dr Mark Hall, Postdoctoral Research Fellow, Western Sydney University <i>How will climate change affect stingless bee population dynamics and crop pollination potential?</i></p>	<p>Allison Mertin, PhD Candidate, Royal Botanic Gardens Sydney <i>Seed and Soil Microbiomes for Natural Ecosystem Restoration</i></p>	<p>Rachel Nalliah, University of Melbourne <i>A love triangle between fire, resource availability and the endangered Heath Mouse</i></p>	<p>SPEED TALK: Professor Timothy Brodribb, University of Tasmania <i>Seeing drought from the leaf perspective</i></p>
	<p>Rocco Notarnicola, PhD, Australian National University <i>Plastic responses of the alpine herb <i>Wahlenbergia ceracea</i> to climate warming?</i></p>	<p>John Whale, PhD Candidate, Western Sydney University <i>Adaptation of foundation red gum <i>Eucalyptus</i> species to climate</i></p>	<p>Dr Holly Sitters, The University of Melbourne <i>Mammal responses to spatial pattern in fire history depend on landscape context</i></p>	
	<p>Anu Singh, PhD candidate, The University of Melbourne <i>The role of climatic variability on eucalypt regeneration in southeast Australia</i></p>	<p>SPEED TALK: Dr Patricia Lu-Irving, Royal Botanic Gardens &amp; Domain Trust <i>Mating system and diversity in seed collections for restoration/conservation</i></p>	<p>Anna Lemon, Charles Darwin University <i>Managing Fire to Recover Monsoon Vine Thickets on the Dampier Peninsula</i></p>	
	<p>Travis Britton, PhD Candidate, University of Tasmania, Hobart, Australia <i>Neighbour effects on the growth of two eucalypts are dependent on climate</i></p>	<p>Dr Jason Bragg, Research Centre for Ecosystem Resilience, Royal Botanic Gardens, Sydney <i>Adapted and adaptable? The genetics of conservation</i></p>	<p>SPEED TALK: Mercedes Ondik, PhD Candidate, UNSW <i>Land management influences the effects of fire on soil properties and ecosystem services</i></p>	<p>16:30-17:30 LIVE DISCUSSION</p>
	<p>Dr Jenna Wraith, Griffith University <i>The impact of climate change on threatened orchids in Queensland</i></p>	<p>SPEED TALK: Dr Enhua Lee, Department of Planning, Industry and Environment <i>Using genetic tools and climatic models for planning the conservation translocation of <i>Eucalyptus</i> sp. <i>Cattai</i></i>  Jessica Latimer, Student, The University of Queensland</p>	<p>SPEED TALK: Simeon Zylinski, University of Melbourne <i>Fire regimes and landscape structure – interactions shaping mammal communities in the Mount Lofty Ranges</i></p>	

		<i>Conservation genetics of the northern quoll (Dasyurus hallucatus) on Groote Eylandt</i>	SPEED TALK: Joshua Whitehead, University of New England <i>Post-fire herb growth can support pollinators and partially alleviate the severity of drought impacts</i>	
	Dr Melinda Laidlaw, Senior Ecologist, Queensland Herbarium <i>Climate change impacts on cloud forests in the Gondwana Rainforests of Australia World Heritage Area</i>	SPEED TALK: Dr Samantha Yap, Research Centre for Ecosystem Resilience, Royal Botanic Gardens Sydney <i>Assessing evolutionary potential loss in rare species and solutions to recover or maintain diversity</i>	SPEED TALK: Erin Thomas, Masters Student, The University of Melbourne <i>Impact of fire and habitat composition on the daily routine of macropods</i>	
	SPEED TALK: Mohammad Golam Kibria, PhD Candidate, Hawkesbury Institute for the Environment, Western Sydney University <i>Testing tree performance in the drier and hotter climate urban forests</i>	Dr Trevor Wilson, ABRIS Postdoctoral Fellow, Royal Botanic Gardens & Domain Trust <i>Overestimation of species presents complications for conservation</i>	SPEED TALK: Emily McColl-Gausden, PhD Student, The University of Melbourne <i>Using environmental DNA sampling to survey bushfire impacts on platypus</i>	
	17:55-18:05 LIVE QA with all presenters	17:55-18:05 LIVE QA with all presenters	17:40-17:50 LIVE QA with all presenters	
18:00 – 19:00	Science Communication Research Chapter Mixer			
19:00 – 20:30	Online Trivia			

#### Thursday 3 December 2020

9:00 – 10:00	PLENARY SESSION FOUR Chair: Sacha Jellinek
	Keynote presentation: AERA presentation: Diana Fisher <i>The evolution and ecology of semelparity</i>
	ESA Ecological Impact Award Presentation: Dr Yung En Chee and Dr Rhys Coleman <i>Ecological modelling and waterway management prioritization in greater Melbourne</i>
10:00 – 12:00	CONCURRENT SESSIONS 10



	<p>SYMPOSIUM: Our national State of the Environment – Key issues during a time of change (1) CHAIRS: Dennis Murphy, Jeanette Corbitt, Ian Cresswell</p>	<p>SYMPOSIUM: Building resilience and recovering communities: collaborations between practitioners and researchers CHAIR: Sacha Jellinek</p>	<p>SYMPOSIUM: Short-term impacts of the 2019-20 Fire Season CHAIRS: Owen Price, Mark Ooi</p>	<p>OPEN FORUM: Plant Ecology CHAIR: Joshua Buru</p>
	<p>Dr Becky Schmidt, CSIRO Land and Water <i>Integrating the 2021 Australian State of the Environment and environmental-economic accounts</i></p>	<p>Dr David Bain, NSW Department of Planning, Industry and Environment <i>Partnerships secure the conservation of Pomaderris walshii</i></p>	<p>Dr Rachael Gallagher, Macquarie University <i>Assessing the impact of the 2019-2020 bushfire season on Australia's 26,000 plant species</i></p>	<p>Professor Caroline Gross, University of New England <i>High specialisation and modularity in a mangrove pollination network invaded by two super-generalist Apis species</i></p>
	<p>Erica Marshall, PhD Candidate <i>Beyond habitat compensation in biodiversity offsetting: do species-based metrics improve species persistence?</i></p>	<p>SPEED TALK: Dr Nicole Hansen, Department of Planning, Industry and Environment <i>How the Saving our Species program ensures threatened species monitoring leads to conservation outcomes</i></p>	<p>Professor David Keith, Professor of Botany, University of NSW <i>Loss of resilience after longwall mining leads to post-fire collapse of peatland ecosystems</i></p>	<p>Simone Currie, Master's Student, La Trobe University <i>Intraspecific Ploidy Variation in Sweet Quandong (Santalum acuminatum): Evidence for Polyploidy and Ploidy Reduction</i></p>
	<p>Dr Rowan Trebilco, Team Leader, CSIRO Oceans and Atmosphere <i>2021 State of the Australian Marine Environment: a seascape of change</i></p>	<p>Jennie Cramp and Kate McShea, NSW Rural Fire Service <i>Supporting communities to meet their fire management goals: the evolution of the Hotspots Fire Project</i></p>	<p>Paul Donatui, QLD Fire &amp; Biodiversity Consortium, Healthy Land &amp; Water <i>The 19/20 Queensland Bushfire Season and Post-fire Plant Responses in the Border Ranges (Qld)</i></p>	<p>Dr Victor Neldner, Science Leader, Queensland Herbarium <i>Monitoring changes in ground layer of Queensland tropical savannas over 23 years</i></p>
	<p>Gabrielle Lebbink, University of Queensland <i>Land use change and the spread of invasive species: A case study from Queensland, Australia</i></p>	<p>Renée Hartley, PhD Candidate, Australian National University <i>Collaboration bolsters efforts to conserve an Endangered lizard in the face of increasing disturbances</i></p>	<p>Justin Mallee, Saving Our Species Project Officer, NSW National Parks and Wildlife Service <i>Fire in Gondwanan Rainforests, impacts and recovery of range restricted threatened flora, north east NSW</i></p>	<p>Dr John Morgan, La Trobe University <i>Seed supply ecology in the high mountains</i></p>
	<p>SPEED TALK: Dr Jasmin G. Packer, Environment Institute, The University of Adelaide <i>Can learning from invasion syndromes inform multi-disciplinary environmental indicators for threatened species?</i></p>	<p>Dr Sacha Jellinek, Research Fellow, University of Melbourne <i>Community-based Monitoring to Assess Revegetation Outcomes</i></p>	<p>Berin Mackenzie, Scientist (Ecosystems &amp; Threatened Species), Department of Planning, Industry and Environment (NSW) <i>Persistence of Wollemi Pine under contemporary fire regimes: impacts and insights from the 2019-20 bushfires</i></p>	
	<p>Dr Elisa Bayraktarov, Postdoctoral Research Fellow, The University of Queensland <i>Multispecies trends for Australia's imperilled birds in protected areas</i></p>	<p>Belinda Pellow, Senior Botanist, AMBS Ecology &amp; Heritage <i>Detecting management responses in box gum grassy woodland offsets</i></p>	<p>Nicholas Wilson, PhD Student, University of Wollongong <i>Interactive effects of logging and wildfire on forest carbon stability</i></p>	<p>Dr Amy-Marie Gilpin, Postdoctoral Research Fellow, Western Sydney University <i>High co-flowering species richness increases pollinator visitation to apple flowers</i></p>

		SPEED TALK: Dr Stephanie Pulsford, Ecologist, ACT Government <i>Combating the threat of Sambar Deer through a science-practitioner partnership</i>	Nicola Kent, PhD Student, USC <i>Estimating fire impact on koalas – an impact / control design</i>	Susanna Bryceson, Post-grad, La Trobe University <i>How climate affects the distribution of ancient and modern native grasses in Australia</i>
	Dr David Nipperess, Senior Scientist, NSW Department of Planning, Industry & Environment <i>The Biodiversity Outlook Report: Status and trends in biodiversity and ecological integrity across NSW</i>	Dr Stephanie Stuart, Senior Project Officer, Saving our Species, Department of Planning, Industry and Environment <i>The costs of Saving our Species: from planning to implementation and back again</i>	Dr Katarina Mikac, University of Wollongong <i>Impact and recovery of ground dwelling mammals from the epicentre of the 2020 Currowan bushfire</i>	Dr Lyndsey Vivian, Arthur Rylah Institute How do grasses respond to experimental submergence in summer? SPEED TALK: Meena Sivagowre Sritharan, The Australian National University (ANU) <i>Biotic associations between plants can influence the occurrence of rare species across different vegetation communities</i>
	Dr Dan Metcalfe, Deputy Director, Land & Water, CSIRO <i>Expecting the unexpected – planning for extreme events</i>	Dr David Mackay, University of New England Recovery by bulldozer – collaboratively managing the survival of endangered species that require disturbance  SPEED TALK: Chantelle Doyle, Ecologist/student, UNSW/AMBS <i>Uncovering fundamentals; Mating system and population genetics of Hibbertia spanantha for conservation planning</i>	Professor Jonathan Webb, Discipline Leader, Environmental Science, The University of Technology Sydney <i>Impacts of the 2020 wildfires on an endangered snake: insights from a 29 year study</i>	Osazee Oyanoghafo, Hawkesbury Institute for the Environment <i>Drought tolerance of Hakea species from range of biomes and life-histories is dependent on aridity</i>  SPEED TALK: Dr Susanna Venn, Senior Lecturer, Deakin University <i>Snowmelt timing affects short-term decomposition rates in an alpine snowpatch</i>
	11:55-12:05 LIVE QA with all presenters	11:55-12:05 LIVE QA with all presenters	12:00-12:30 LIVE DISCUSSION	12:00-12:10 LIVE QA with all presenters
12:00 – 14:00	Take a break (Thursday) Virtual Exhibition open 12:00-14:00			
12:30 – 13:30	Lunchtime workshop 6. Tips and Tricks for Starting an online Seminar Series <i>Facilitated by Jasmin Packer</i>			
12:30 – 13:30	Lunchtime workshop 7: Using Virtual Laboratories to solve environmental problems – the EcoCommons Australia Program showcases its analytical tools <i>Facilitated by Rachel Jones, Elisa Bayraktarov, Jenna Wraith</i>			
14:00 – 15:30	CONCURRENT SESSIONS 11			
	ROUND TABLE DISCUSSION: Bringing an Indigenous voice to State of Environment reporting	OPEN FORUM: Conservation Biology (2) CHAIR: Jennifer Finn	OPEN FORUM: Behaviour (1) CHAIR: Bek Christensen	
	<i>Facilitated by Ian Cresswell, Jeanette Corbitt, Dennis Murphy</i>	Daniel Nugent, PhD Candidate, La Trobe University <i>Stock grazing as a tool for habitat management for the Plains-wanderer in lowland temperate grasslands</i>	Bethany Nichols, PhD Researcher, Royal Holloway, University of London <i>Between a rock and a hard place: adaptive sensing and site-specific dispersal</i>	

	<i>Panel Members include Terri Janke, Joe Morrison</i>	Dr Teresa Eyre, Queensland Herbarium <i>Conservation status of a dynamic keystone resource: The decline of nectar-producing habitat for flying foxes</i>	James Dawson, Senior Team Leader, Ecosystems and Threatened Species, NSW Department of Planning, Industry and Environment <i>Should I stay or should I go? Natal dispersal in the spotted-tailed quoll</i>	
		Dr Jessica Rowland, Monash University <i>Effectiveness of conservation management actions for cool-climate peatlands</i>	Joshua Gaschk, University of The Sunshine Coast <i>Quantifying Koala Locomotion Strategies: Implication for the Evolution of Aborealism in Marsupials</i>	
		Jedda Lemmon, Senior Threatened Species Officer, NSW Dept. Planning Infrastructure and Environment <i>Illawarra Socketwood – The tree that moves through the rainforest</i>	Dr Rebecca Wheatley, Postdoctoral Research Fellow, University of Tasmania <i>Slip and slide: animals consider an accident landscape when deciding where and how to move</i>	
		SPEED TALK: Tristan Guillemin, PhD Candidate, Macquarie University <i>Using stable isotopes to understand marlin trophic ecology at the edge of their geographic range</i>  SPEED TALK: Luz Pascal, Undergraduate Student, CSIRO <i>A Shiny-R-app to solve the problem' when to stop managing or surveying cryptic threatened species'</i>  SPEED TALK: Roshan Sharma, PhD Candidate, RMIT University <i>Improving adequacy of ecosystems and populations on private land</i>	Siobhan Heatwole, PhD Candidate, University of Wollongong <i>Large spatial scale comparisons of social behaviour across ecological contexts for predicting resilience</i>	
		Matthew Rees, PhD Student, University of Melbourne <i>Drivers of feral cat density and spatio-temporal behaviour in temperate forests</i>	Thomas Clarke, PhD Candidate, Macquarie University <i>Spider body plans: the interplay of phylogeny and hunting methods</i>	
		15:25-15:35 LIVE QA with all presenters	15:25-15:35 LIVE QA with all presenters	
15:30 – 16:00	Quick refresh break (Thursday)			
16:00 – 17:00	CONCURRENT SESSIONS 12			
	OPEN FORUM: Urban Ecology (2) CHAIR: John Morgan	OPEN FORUM: Behaviour (2) CHAIR: Jennifer Finn	OPEN FORUM: Conservation Biology (3) CHAIR: Daniel Falster	OPEN FORUM: Pollution Impacts on Wildlife CHAIR: Don Driscoll
	SPEED TALK: Ariningsun Cinantya, PhD Student, Macquarie University <i>Recovery of horticultural plants from prolonged drought stress: implications for research and practice</i>	Dr Andrew Hoskins, Research Scientist, CSIRO Health and Biosecurity <i>Seasonal foraging habitat selection by the little red flying-fox across Queensland</i>	Dr Dejan Stojanovic, Postdoc, Australian National University <i>Spatially biased recovery actions aren't enough to protect migratory species</i>	Angela Hansen, PhD Candidate, University of Tasmania <i>Lead and other trace elements in five species of Australian duck in Tasmania</i>

	SPEED TALK: Sophie Moore, Master of Research Student, Macquarie University <i>Comparing functional diversity of native and planted tree species in urban centres of Australia</i>	SPEED TALK: Kaylah Del Simone, PhD Candidate, The University of Queensland <i>How limb morphology influences manoeuvrability and speed in <i>Isoodon macrourus</i></i>	Dr Katherine Moseby, Research Fellow, University of University of New South Wales <i>Adaptive management: the key to successful reintroduction of western quolls in South Australia</i>	Mariel Fulham, The University of Sydney <i>Widespread occurrence of human-associated <i>Escherichia coli</i> in free-ranging sea lion and fur seal pups</i>
	SPEED TALK: Sourav Das, PhD Candidate, Macquarie University <i>Urban living expands estimates of the climate niches of tree species</i>	Matt Bradford, CSIRO <i>The diet of the little red flying fox (<i>Pteropus scapulatus</i>)</i>	SPEED TALK: Clare Bracey, Research Assistant, Monash University <i>A rapid evidence review of the management interventions for Australian woodlands</i>	Dr Michael Bertram, Postdoctoral Researcher, Swedish University of Agricultural Sciences <i>Disruption of male mating strategies in a chemically compromised environment</i>
		Professor Andrew T. D. Bennett, Deakin University <i>Clinical Lateralization of behaviour in parrots</i>	Shannon Treloar, Student, Edith Cowan University <i>Potential for resource competition between co-existing threatened mammals in a fenced reserve in Western Australia</i>	Shannon Taylor, PhD Candidate, The University of Sydney <i>Anthropogenic toxicants in two declining Australian pinniped populations</i>
	16:26-16:39 LIVE QA with all presenters	17:00-17:10 LIVE QA with all presenters	17:00-17:10 LIVE QA with all presenters	17:00-17:10 LIVE QA with all presenters
17:20 – 18:00	CLOSING SESSION Chair: Jodi Price			
	Prizes and Awards Photo competition winners' announcements			

#### Friday 4 December 2020

9:00 – 15:30	Workshop 8: Writing for Publication <i>Facilitated by Nigel Andrew</i>
	Workshop: Considering Bioacoustics Monitoring? Factors to consider and How to Start <i>Facilitated by Ali Donargo, Dave Roberts, Jeff King</i>
	Workshop: Wildlife Drones <i>Facilitated by Debbie Saunders</i>

