

Programme

Please note: subject to change

Symposium

Open session

Sunday 5 January 2020	
09:00 - 16:00	<p>Pre-congress workshop: An open-source hardware GPS data logger for wildlife movement studies Matt Cross Venue: Please meet at the front of the Department of Zoology building, 340 Great King Street</p>
09:00 - 17:00	<p>Taieri Ridge/ Macraes fieldtrip (ticketed event) Venue: Please meet at University of Otago in the ISB Link Building</p>
14:00 - 15:00	<p>Student paper judges meeting Venue: St David A & B</p>
16:00 - 18:00	<p>Registration open Venue: ISB Link Building</p>
Monday 6 January 2020	
08:00 - 12:00	<p>Exhibition pack in Venue: ISB Link Building</p>
08:00 - 19:00	<p>Registration open Venue: ISB Link Building</p>
12:00 - 13:30	<p>Congress opening & Māori welcome (Mihi Whakatau) Venue: St David & Castle 1 (video streamed)</p>
13:30 - 14:30	<p>Lunch amongst the exhibition Venue: ISB Link Building</p>
14:30 - 15:15	<p>Keynote: Slowly does it: working with reptiles that may outlive their researchers Alison Cree Venue: St David & Castle 1 (video streamed)</p>
15:15 - 15:45	<p>Afternoon tea amongst the exhibition Venue: ISB Link Building</p>

Concurrent sessions	Species Conservation	Population & Landscape Genetics 1	X-ray Microtomography in Herpetology: A New Era of Morphological Study	Amphibian Bioacoustic Symposium	Adaptation & Evolution 2	Adaptation & Evolution 1	Novel Approaches to Science Communication & Conservation Engagement in Herpetology	New & Innovative Technologies for Herpetological Research
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
16:00	Evaluating long-term population age structure changes of a critically-endangered frog Sophie McCulloch	Sex-biased dispersal in the Asp viper Sylvain Ursenbacher	Evolution of dermal armour in monitor lizards (Squamata: Varanidae) Chris Broeckhoven	Comparison of call properties, morphometrics and genetics as clade delineating tools in North-Asian Hylid treefrogs Amaël Borzée	First report of extracranial calcified endolymph in <i>Liopholis</i> skinks (Scincidae) and its relationship with burrowing Rocio Aguilar	Digging into the diversification of the mantellid frogs of Madagascar (Anura: Mantellidae) Angelica Crottini	When the world falls in love, case study of a small frog going global Teresa Camacho Badani	Utilizing do-it-yourself open-source technologies to make easier the life of the field herpetologist Patrick Cain
16:05					The powerhouse of asexual cost? Endurance and mitochondrial efficiency in parthenogenetic whiptail lizards (genus: <i>Aspidoscelis</i>) Randy Klabacka			
16:10					The role of variable temperatures on acclimation of thermal and performance phenotypes Mitchell Hodgson			
16:15	Lessons learned from 10 years of Eastern Indigo Snake (<i>Drymarchon couperi</i>) conservation Houston Chandler	Salamander population persistence from a spatially explicit cross-ecosystem perspective Kaori Takagi	Functional morphology and evolution of dorsal shields in horned frogs (Anura: Ceratophryidae) Chris Broeckhoven	Identifying frog chorusing in environmental recordings using acoustic indices and false-colour spectrograms Sheryn Brodiba	Climate change drives reptile community collapse and adaptation on Orchid Island Wen-san Huang	Transcriptional comparison of MHC IIβ1 in amphibians that are susceptible and resistant to chytrid fungus Minjie Fu	Using social media to promote positive outcomes for amphibians and reptiles Steven Allain	Lure, Trap & Retreat! Development of a novel 'no-dig' trap for terrestrial herpetofauna Trent Bell
16:30		Comparative phylogeography of the Brazilian Atlantic Forest leaf litter lizards (genus <i>Enyalius</i>) Connor French	Biomechanics and morphological patterns in head-first burrowing frogs Marta Vidal-Garcia	Acoustic communication applied for the control of invasive cane toads <i>Rhinella marina</i> Kiyomi Yasumiba	Microclimate, more than phylogeny, drives interspecific variation in heat tolerance within a subtropical anuran community Gustavo Adolfo Agudelo Cantero	Evolution of antigen processing genes in salamanders Gemma Palomar	#Frogtraits and Swamp Trolleys: new art and creative strategies in amphibian conservation and public outreach CiCi Blumstein (Agent Amphibian)	Citizens capturing cryptic and charismatic chelonians for conservation: photographic capture-recapture and mobile app development Matt Cross

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Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
16:45	Using movement to inform conservation corridors for Mojave Desert Tortoises Steven Hromada	Parasites driving host divergence? Recent research in a long term study of Australian sleepy lizards Mike Gardner	Using MicroCT to investigate morphological evolution of elapid snake skulls Emma Sherratt	The structural characteristics of anuran advertisement calls in different habitats Mike Emmrich	Alpine temperatures and sex reversal of alpine Eastern three-lined skinks in South Eastern Australia Duminda Dissanayake	Local adaptation to dietary toxins shapes poison frog chemical defenses Stephanie Caty	The importance of film for communication and outreach in the field of herpetology Katherine Garrett	Evaluation of a camera trapping system for detecting Eastern Massasauga Rattlesnakes Gregory Lipps
17:00	<i>Proteus</i> conservation project in Croatia Dusan Jelic	Genomic signatures of population structure and disease susceptibility in common toads Robert Jehle	Comparative skull morphology of Leptotyphlopidae via Micro-CT images Claudia Koch	Beam forming as an acoustic tool for population counts in amphibians Catharina Karlsson	Degrees of change: within and between population variation in phenological reaction norms in a lizard Erik Wapstra	Investigating molecular adaptations in dendrobatid poison frogs Karen Siu-Ting	Using social media to benefit herpetology, your career, and public perception of reptiles and amphibians Jonathan Kolby	CritterPic®: A new tool for passive detection and photography of herpetofauna Katherine Muchna
17:15	Conservation status of the Floreana racer (<i>Pseudalsophis biserialis biserialis</i>) in the Galapagos Islands Luis Ortiz-Catedral	Population genetic analyses of the rediscovered Hula painted frog uncover unexpected structure R.G. Bina Perl	The weird skull of <i>Xenotyphlops</i> and a reinterpretation of blindsnake origins Mark D. Scherz	The relevance of bioacoustic monitoring for reassessing conservation status of bush frogs in Western Ghats Robin Suyesh	Extreme temperatures and developmental instability across reptiles Lisa Schwanz	Fluctuating toxins and the evolution of chemical defenses in a poisonous amphibian Gary Bucciarelli	Indigenous culture and folk taxonomy as communication and engagement tools in herpetology Fortunate Phaka (via video)	Fine-scale density modeling of an endangered sand-dune lizard with drone mapping Ismael Brack
17:30	Artificial retreats increase the abundance of the endemic and endangered lizard <i>Liolaemus lutzae</i> from Brazil Carlos Rocha	Genetic pattern of the eastern golden frog (<i>Pelophylax plancyi</i>) in the megacity, Shanghai Xu Wei	Skull anatomy of a rare mid-Cretaceous tetrapod using HRCT data Juan Diego Daza	Let the little guys speak! Anuran community ecology and calling acoustics in windfarms Cory Trowbridge	Transcriptomics of viviparity and long egg retention in a bimodally reproductive skink (<i>Saiphos equalis</i>) Camilla Whittington	Electric blue: novel toxins in long-glanded <i>Calliophis</i> sidestep neurotoxic arms race Daniel Dashevsky	Open Croaks: 'Q+A' session Cici Blumstein (Agent Amphibian)	Experimental eradication of invasive Brown Treesnakes with an automated bait manufacturing and aerial delivery system Shane Siers
17:45		Genetic population assignment as a tool for identifying geographic origin of trafficked freshwater turtles Matthew Young	High throughput microCT scanning of small fossils: an example using Australian herpetofauna Christy Hipsley			Twofold stealth; a new perspective on anti-predatory repertoires Ashadee Miller		
18:00 - 19:30	Welcome reception amongst the exhibition (all delegates) Venue: ISB Link Building							

Tuesday 7 January 2020								
08:00 - 19:00	Registration open Venue: ISB Link Building							
08:30 - 09:15	Keynote: Ecology, behaviour and conservation of Southeast Asian amphibians: what can we learn from the Island of Borneo Ulmar Grafe Venue: St David & Castle 1 (video streamed)							
Concurrent sessions	Behavioural Ecology 1	Taxonomy & Phylogenetics 1	Emerging Frontiers in Sex Chromosome Evolution	Ecological Interactions 1	Moving Herpetofauna in the Right Direction Part I: Conservation Translocations	Adaptation & Evolution 3	Ecophysiology 1	Amphibian Disease Susceptibility in a Changing World
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
09:30	Sticky fingers: microhabitat choice, adhesive performance and toe-pad morphology in velvet geckos (genus: <i>Oedura</i>) Lin Schwarzkopf	Chromosome diversity in Malagasy reptiles: an evolutionary perspective from available data and new chameleon karyotypes Marcello Mezzasalma	Sex chromosome evolution in snakes and lizards Tony Gamble	Anuran larvae disperse seeds and enhance germination of aquatic plants Ivan Gomez-Mestre	Challenges, desperation and hope: a review of herpetofauna conservation translocations Luke Linhoff	Rapid differentiation of sexual signals in Cane toads <i>Rhinella marina</i> Kiyomi Yasumiba	The future of Western Pond Turtles: what might climate change do? David Germano	Global impacts of chytridiomycosis on amphibians Ben Scheele
09:45	Which shade of yellow? A preliminary study of dorsal pattern determinants in aposematic salamanders Raoul Manenti	Integrative taxonomy of the rock gecko <i>Cnemaspis siamensis</i> species complex (Squamata: Gekkonidae) in southern Thailand Natee Ampai	Uncovering the mechanisms and drivers of the rapid transitions among frog sex chromosomes Dan Jeffries	Putative mutualistic symbiosis between an ant and a snake Yosuke Kojima	Modeling strategies and evaluating success during repatriations of elusive and endangered species Brian Folt	Evolution of caudal luring behavior in Crotalinae Oppel, 1811 (Serpentes: Viperidae) Aida Giozza	Metabolic heat in sea turtle nests: does it matter? Malindi Gammon	The amphibian chytrid fungus in New Zealand Phil Bishop
10:00	Is rapid colour change in Raukawa geckos (<i>Woodworthia maculata</i>) an adaptation to predator avoidance? Florence Kelly	Integrative approach using phylogenomics and high-resolution X-ray computed tomography for species delimitation in cryptic taxa Jane Melville	Sex chromosomes in reptiles are more stable than thought Lukáš Kratochvíl	Nature's pitfall trap: salamanders as rich prey for carnivorous plants in a nutrient-poor bog ecosystem Patrick Moldowan	Learning from UK conservation translocations of <i>Pelophylax lessonae</i> Jim Foster	Ecomorphological diversity in natricine snakes Simon Loader	Can tuatara offset a male-biased sex ratio with behavioural changes? Lin Lin Liu	Amphibian "silent spring": the catastrophic collapse of a mega-diverse community at La Planada Reserve, Colombia Patricia Burrowes
10:15	Effect of moon phase on nocturnal snake activity Kevin Messenger		Evolution of sex-chromosomes within species – a case study in the Australian Marbled Gecko Rebecca Laver	<i>Varanus rosenbergi</i> and <i>Nasutitermes exitiosus</i> : commensalism symbiosis? Peggy Rismiller	Preparing for reintroduction: behavioral and morphological fitness of captive-bred amphibians produced from cryopreserved sperm Sinlan Poo	A Neogene carettocheliid turtle from Sarawak, Malaysia Arthur White	Endocrine disruption alters developmental body condition, energy allocation, and juvenile performance in <i>Rana temporaria</i> Katharina Ruthsatz	Linking host life history, landscape ecology, and climate to predict epizootics in Brazilian terrestrial-breeding amphibians C. Guilherme Becker

Morning tea amongst the exhibition Venue: ISB Link Building								
10:30 - 11:00								
Concurrent sessions	So Many Snakes (plus Lizards & Toads) in so Little Time: Celebrating the Career of Rick Shine	Citizen & Cultural Science	Emerging Frontiers in Sex Chromosome Evolution	Climate Change & Shifting Phenology in Amphibians: Causes & Consequences	Moving Herpetofauna in the Right Direction Part I: Conservation Translocations	Phylogeography & Biogeography of Neotropical Herpetofauna	Behavioural Ecology 2	Amphibian Disease Susceptibility in a Changing World
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
11:00	Introduction Tracy Langkilde Forays into understanding mate choice in herps Tracy Langkilde	Use and traditional knowledge of endemic chelonians of the Mapimi Bolson in northern Mexico Rosalinda Palomo & Ana Gatica	Six sex-chromosomes in a Taiwanese frog Ikuo Miura	A global synthesis of phenological responses to climate change in amphibians and other animal taxa Jeremy Cohen	Reintroduction efforts for two species of Panamanian Harlequin frogs (genus: <i>Atelopus</i>) threatened by chytrid fungus Blake Klocke	Biogeography and the timing of anole lizard diversification Richard Glor	Food, not friend: tadpoles of the sandpaper frog, <i>Lechriodius fletcheri</i> , cannibalise conspecific eggs John Gould	When chytrid fungus invades: Integrating theory and data to understand disease-induced amphibian declines Cherie Briggs
11:15	Shining the light on a career full of sex, conflicts, and transgender tactics Mats Olsson (via video)	Documenting frog distributions using mobile phones and citizen scientists Renata Platenberg	Shared ancient sex chromosomes in varanids, beaded lizards and alligator lizards Michail Rovatsos	Large-scale monitoring of breeding phenology in tropical and temperate anurans: insights for climate change research Diego Llusia	LIFE Trito Montseny: The conservation toolbox for an endemic newt (<i>Calotriton arnoldi</i>) Gerardo Garcia	Phylogenomics of the South American <i>Liolaemus</i> lizards demonstrates rapid radiation and rampant reticulation Damien Esquerré	Urban plums and toads: do fleshy fruits affect the post-metamorphic growth of amphibians? Mikołaj Kaczmarek	Understanding amphibian declines in complex environments Lesley Alton
11:30	The return to an aquatic life, propulsive thrust of swimming in terrestrial and marine snakes Xavier Bonnet	Using citizen science to reduce detection times for invasive reptiles and amphibians Greg Pauly	Sex chromosome homologies across dragons (Squamata: Agamidae) Shayer Alam	Warming, green-up, breeding phenology and development in the wood frog: a 20-year study Andis Arietta & Dave Skelly	Survival and recovery of amphibian populations post <i>Bd</i> -emergence can inform strategies for conservation translocations Steven Whitfield	Phenotypic and life-history diversification in <i>Anomalaglossus</i> despite past introgressions Antoine Fouquet	Metabarcoding as a tool to determine feeding behavior of the European pond turtle Sylvain Ursenbacher	Anthropogenic changes in distribution and severity of disease caused by ranaviruses affecting UK common frogs Trenton Garner
11:35			Sex is determined by XX/XY sex chromosomes in Australasian side-necked turtles (Testudines: Chelidae) Sofia Mazzoleni					
11:40								
11:45	Sea snake research in New Caledonia Claire Gairan		ZZ/ZW sex chromosomes in the granite night lizard (Scincoidea: Xantusiidae) Stuart Nielsen	Impacts of increasing phenological variability on salamander demography and pond community dynamics Thomas Anderson	Mitigating chytrid fungus: successful translocation of a highly susceptible frog species to an environmental refuge David Hunter		Winter ambushing site fidelity of individual pit vipers (<i>Ovophis okinavensis</i>) over 22 years Akira Mori	Impacts of the developmental environment on amphibian disease susceptibility Michel Ohmer
Lunch amongst the exhibition Venue: ISB Link Building								
12:00 - 13:00								
12:15 - 12:45	Film: Amphibians of the Appalachian Mountains Venue: Castle 1							

Concurrent sessions	So Many Snakes (plus Lizards & Toads) in so Little Time: Celebrating the Career of Rick Shine		Editors' Symposium	Climate Change & Shifting Phenology in Amphibians: Causes & Consequences	Moving Herpetofauna in the Right Direction Part I: Conservation Translocations	Adaptation & Evolution 4 (Colour)	Ecology 1	Amphibian Disease Susceptibility in a Changing World
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
13:00	Between a rock and a hard place: conservation of the endangered broad-headed snake Jonathan Webb		Presentations from editors on manuscript preparation, editorial processes, peer review and issues on herpetological publishing. Includes a Q & A session Hinrich Kaiser	Identifying climatic drivers of breeding and emigration phenology in an imperiled salamander Katie O'Donnell	Can increased environmental salinity facilitate the reintroduction of a chytrid-susceptible species? Kaya Klop-Toker	The genetic basis of anole dewlap color, a diverse trait in an adaptive radiation Pietro Longo Hollanda de Mello	Comparison of population and life-history traits of the Western Pond Turtle across its linear range David Germano	Tolerance and resistance in defence against amphibian chytridiomycosis Laura Grogan
13:15	The long-term impact of cane toads on Australia's large varanids Lachlan Pettit			Shifting breeding phenology and the role of photoperiod as a developmental cue under climate change Michael Benard	Temporary translocation to dodge the chytrid bullet: the Honduras Amphibian Rescue and Conservation Center strategy Jonathan Kolby	Experimentally testing the evolutionary drivers of a colorful signal in <i>Anolis</i> lizards John David Curlis	Highlights of long-term studies of endemic New Zealand frogs (Anura: Leiopelmatidae) over several decades Ben Bell	How does it end? Shifts in chytridiomycosis disease dynamics over time Jamie Voyles
13:30	Toads less travelled: an overview of the ecology of cane toads in New South Wales Matthew Greenlees			Do early phenological shifts affect growth and development across life stages in a widespread amphibian? Hilary Rollins	Applying species traits that predict invasiveness to inform probability of success for herpetofauna conservation translocations Melia Nafus	Crypsis or camaraderie: unlocking signals in the colour pattern polymorphism of an Australian lizard Genevieve Matthews	Ecological and genetic variation of the distribution of various species of amphibians at the southern border of their distribution Gad Degani	Integrating ecotoxicology and art to understand and communicate how human activities influence amphibian disease susceptibility Jessica Hua
13:45	Testing the enemy release hypothesis: the global spread of Cane Toads as an accidental experiment Crystal Kelehear			The toad's year: environmental cues of amphibian phenology David Green	Conservation of the Galapagos land iguana (<i>Conolophus subcristatus</i>) Luis Ortiz-Catedral	Being cool is hot: substrate heat capacity influences ventral color evolution in lizards Jonathan Goldenberg	Nonlinear body size cline in a salamander: patterns due to latitudinal compensation and its prevention Hisanori Okamiya	Amphibian immunity, temperature, and disease: A balancing act between host and pathogen Louise Rollins-Smith
14:00	Revealing patterns in cane toad chorusing using long-term acoustic monitoring Lin Schwarzkopf			Effects of experimental warming on hibernation behavior of amphibian populations Yiming Li	Looking back and leaping forward: New Zealand native frog translocations and future priorities Sally Wren	Using frog genomes in evolutionary genomics: understanding the genetics and evolution of poison-dart frog coloration Roberto Marquez	Evaluating aerial descent in the flap-legged geckos (genus <i>Luperosaurus</i>) of the Philippines Matthew Heinicke	

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Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
14:15	Apex reptilian predators in Northern Australia: can landscape CTA training curb cane toad impacts Georgia Ward-Fear		Presentations from editors on manuscript preparation, editorial processes, peer review and issues on herpetological publishing. Includes a Q & A session continued Hinrich Kaiser	Discussion Michael Benard		Fine-scale evolution of aposematism in poison frogs Rebecca Tarvin	Population structure of the Morelet's Crocodile (<i>Crocodylus moreletii</i>) in the region of Calakmul, Campeche, Mexico Robert Jehle	Proactive conservation: developing strategies to combat the salamander-eating fungus Molly Bletz
14:20							Ecological aspects of <i>Gerrhonotus infernalis</i> in Parque Ecológico Chipinque, Nuevo León, México Margarita García Bastida	
14:25							Aspects of the ecology of two freshwater turtle species in KwaZulu-Natal, South Africa Cormac Price	
14:30	Influence of incubation environment on lizard learning Martin Whiting					Antipredator defenses promote morphological evolution in uropeltid snakes Vivek Cyriac	Predicting future range shifts of a stream indicator species, <i>Rhyacotriton variegatus</i> , under climate change Gwendolynn Bury	An interaction between climate change and infectious disease drove widespread amphibian declines Jeremy Cohen
14:45	Adaptive responses of the embryos of oviparous reptiles to spatial and temporal variations in nest temperatures Weiguo Du					Diversification of melanosome shape is linked to physiological shifts in vertebrate taxa Matthew Shawkey		Anuran thermal preferences in health and disease: considerations on a complex problem Carlos Arturo Navas
15:00 - 15:30	Afternoon tea amongst the exhibition Venue: ISB Link Building							

Concurrent sessions	So Many Snakes (plus Lizards & Toads) in so Little Time: Celebrating the Career of Rick Shine	Behavioural Ecology 3			Adaptation & Evolution 5 (Behaviour)	Adaptation & Evolution 6 (Morphology)	Conservation Biology 1	Amphibian Disease Susceptibility in a Changing World
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
15:30	High-country herpetology: insights from a 20-year ecological study of alpine lizards Melanie Elphick	Proximate factors that elicit centipede-eating behavior of a Japanese Pit Viper Kyosuke Hamanaka			Metamorphosing strategy of stream tadpoles Noriko Iwai	Comparative embryology of the VNO and associated structures in squamate reptiles: a 3D approach Paweł Kaczmarek	Assessing avian predation on New Zealand's lizard fauna using 3D-printed replicas Brittany Florence-Bennett	Genomic approaches to amphibian conservation Tiffany Kosch
15:35		Foraging strategy of feeding on sea turtle hatchlings and eggs on Okinawa Island Kazumasa Matsumoto						
15:40		Life on the edge - Green and Golden Bell Frogs in a coastal lake Francis Lemckert						
15:45	Effects of population density and timing of hatching on phenotypic selection in an invasive lizard Daniel Warner	Using camera traps (NEWTRAP) to produce efficiently high-resolution time series of newt observations Xavier Mestdagh				Variation on the atlas- axis complex in Gekkota Brittany Cornell	The necessity of long-term data for quantification of recovery of long-lived species of conservation concern Jacqueline Litzgus	MHC associated differential survival to infection of two strains of <i>Batrachochytrium dendrobatitis</i> in common toads Jacob Høglund
15:50		Morphology, performance, and ecology of three sympatric turtles in a tropical dry forest Taggart Butterfield						
15:55		Quantity discrimination of an Asian freshwater turtle (Geoemydidae: <i>Mauremys sinensis</i>) Feng-Chun Lin						

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16:00	Is Rick Shine really a cognitive neuroscientist in disguise? James Shine	Hide or escape? Variations in escape behaviour of three North East Asian anurans Yoonjung Yi			Phenotypic plasticity and rapid adaptation drive response to invasive predators in a threatened frog Andrea Melotto	Snakelike forms, a buried diversity: head shape evolved in association with burrowing substrate in fossorial lizards Vinicius Anelli	Captive incubation boosts recovery of a relict tuatara population Susan Keall	Bad neighbours? Amphibian chytrid fungus infection dynamics in three frog species of Sydney Jordann Crawford-Ash
16:05								
16:10								
16:15	When research zeal collides with family life Terri Shine	Toads or fireflies? Which do Asian natricine snakes prefer as a source of steroidal toxins? Masaya Fukuda			Co-evolutionary history matters: competition strength between introduced frogs and native toads on Haida Gwaii, Canada Roseanna Gamlen-Greene	Skull variation within a clade of miniaturized snakes from Australia (Squamata: Typhlopidae: <i>Anilius</i>) Rebecca Laver	Evaluating the effectiveness of a 15-year headstarting programme for wood turtles (<i>Glyptemys insculpta</i>) Damien Mullin	
16:30	A life in science, as seen in the rear-view mirror of an increasingly slow-moving vehicle Rick Shine	Breaking the law: sexual mate choice behavior of female European common frogs Carolin Dittrich					Restinga - the north coast of Bahia sand dune herpetofauna, Brazil Moacir Tinoco	
16:35								
16:45 - 17:00	<i>Delegates move to plenary session</i>							
17:00 - 17:45	Keynote: Adventures in amphibian conservation: from scientific expeditions to citizen science Jodi Rowley Venue: St David & Castle 1 (video streamed)							
18:00 - 19:00	Poster session, odd poster board numbers presented Venue: The Common Room, ISB Link Building							
19:00 - 20:00	Australian Society of Herpetologists Annual General Meeting (members only) Venue: Castle 1							
19:00 - 20:30	WCH Executive and IHC joint meeting (members only) Venue: St David A & B							

Wednesday 8 January 2020								
08:00 - 19:00	Registration open Venue: ISB Link Building							
08:30 - 09:15	Keynote: Sound communication in aquatic turtles Camila Ferrara Venue: St David & Castle 1 (video streamed)							
Concurrent sessions	Ecological Interactions 2	Taxonomy & Phylogenetics 2	New Perspectives on Biology of Sea Snakes	Biology & Conservation of Paedomorphosis in Amphibians	Ecophysiology 2	Moving Herpetofauna in the Right Direction Part II: Translocations & Tools To Mitigate For Development	Diversity & Distributions 1	Education, Outreach & Citizen Science
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
09:30	Investigating patterns of ecomorphological diversification and convergence in savannas from Australia and Brazil Jessica Fenker	History and geography resolve a problem in African Sand Frog taxonomy (<i>Tomopterna</i>) Alan Channing	Introduction Harold Heatwole & Kate Sanders	Diversification via paedomorphosis in salamanders Ronald Bonett	Ecophysiological variation in lizards better explained by proximate or distal environmental predictors? Rodolfo Andersons	Mitigating for development: where are we at and where are we going? Jennifer Germano	The role of paleogeographic history in the evolution of Afro-Arabian squamate reptiles: a large-scale perspective Hector Tejero-Cicuendez	The role of education in amphibian conservation Marcileida Maria Dos Santos (via video)
09:45	Competition and resources shape multidimensional trophic niche overlap in Brazilian thin-toed frogs (<i>Leptodactylus</i> sp) Travis Ingram	An update and taxonomic review of snakes housed in the herpetological collection from Auckland Museum María Hoyos	The species status of the viviparous sea snakes Arne Rasmussen	Lifetime fitness, sex-specific life history, and the maintenance of a polyphenism Thomas Anderson	Maternal effect as an adaptation to drought in a desert-dwelling oviparous lizard Yang Wang	How can mitigation guidelines be applied effectively? Lea Randall	Diversification and biodiversity dynamics of the Arabian squamate reptiles Jiri Smid	Online instruction of herpetology for gifted students Allison Metler
10:00	Disentangling the mechanisms behind lizard-spinifex relationships Kristian Bell	The status of caecilian (Amphibia: Gymnophiona) collections at the Natural History Museum, London, UK Rachunliu Gaiduwan Kamei	Diversification dynamics in viviparous sea snakes Kate Sanders	Conservation ecology of facultative paedomorphosis in newts in a world of introduced alien species Mathieu Denoël	Thermal biology of <i>Pristimantis medemi</i> along an altitudinal gradient in the Colombian Andes Andres Aponte	Past and present status of development mitigation for herpetofauna in the UK Richard Griffiths	Contribution to the herpetofauna of south-eastern Angola Werner Conradie	Community engagement in amphibian and reptile research as a path for the new century Maureen Donnelly
10:05	Niche differentiation of two coexisting tadpoles on Emei Mountain Zhao Tian							
10:10	Family specific herbivory in West-African Sabre-toothed Frogs Marvin Schäfer							

Concurrent sessions	Ecological Interactions 2	Taxonomy & Phylogenetics 2	New Perspectives on Biology of Sea Snakes	Biology & Conservation of Paedomorphosis in Amphibians	Ecophysiology 2	Moving Herpetofauna in the Right Direction Part II: Translocations & Tools To Mitigate For Development	Diversity & Distributions 1	Education, Outreach & Citizen Science
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
10:15	Savanna survival: how fire regimes, livestock grazing and predation by feral cats affects small - medium reptile survival in north-west Australian savanna. Eridani Mulder	Johann Gottlob Schneider's <i>Historiae Amphibiorum</i> (1799-1801), a seminal contribution to herpetology Aaron Bauer	The evolution and development of microcephalic sea snakes Emma Sherratt	Rediscovering the axolotl as a model for paedomorphosis Randal Voss	Climatic preferences of a sand lizard population (<i>Lacerta agilis</i> Linnaeus 1758) in western Germany Dennis Rödder	A novel approach to addressing development impacts on <i>Triturus cristatus</i> , a strictly protected UK amphibian Jim Foster		Using crowd-sourced data for conservation: the Idaho Amphibian and Reptile iNaturalist Project Charles Peterson
10:20							Present and recent past habitat suitability ranges of northeast Asian treefrogs using maximum entropy models Desiree Andersen	
10:25							The diversity of Short-legged Toad (Anura: Megophryidae: Megophrys) in China Yao Li	
10:30 - 11:00	Morning tea amongst the exhibition Venue: ISB Link Building							

Concurrent sessions	Beyond CTmax & CTmin: Advances in Studying the Thermal Limits of Reptiles & Amphibians		New Perspectives on Biology of Sea Snakes	Biology & Conservation of Paedomorphosis in Amphibians	Amphibian Conservation in the Anthropocene – Challenges, Priorities & Solutions for the Human Epoch	Moving Herpetofauna in the Right Direction Part II: Translocations & Tools to Mitigate for Development	<i>Batrachochytrium dendrobatidis</i> 1	Education & Outreach
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
11:00	How temperature variation drives latitudinal differences in ectotherm sensitivity to heat extremes during warming Alex Gunderson		Using high throughput sequencing to elucidate the evolutionary history of sea snakes James Nankivell	Spatiotemporal variability of paedomorphosis in <i>Ambystoma talpoideum</i> across two metapopulations Thomas Anderson	Amphibian decline in the Anthropocene: knowledge and uncertainties David Green	Lizard mitigation in New Zealand Jennifer Germano	Cross-continental, interlineage competition and virulence of <i>Batrachochytrium dendrobatidis</i> Trenton Garner	Progress report on herpetological sampling and oVert (Open Exploration of Vertebrate Diversity in 3D) Gregory Watkins-Colwell
11:15	Will the world be too hot for Lepidosauria to survive? Luisa Diele-Viegas		Variations of jaw size across genetically homogenous sea snake populations reveal phenotypic plasticity Xavier Bonnet	Ecological divergence of the eastern newt, <i>Notophthalmus viridescens</i> Mizuki Takahashi	Multiple kinds of success in amphibian conservation Evan Grant	Walking the line: balancing the needs of wildlife and development Jacqui Wairepo & Dylan Van Winkel	Resolving <i>Batrachochytrium dendrobatidis</i> lineage distribution and ecology in South Africa Pria Ghosh	
11:30	Adaptive radiation in the multidimensional phenotype Brooke Bodensteiner		It came from the land: venom variation in aquatic snakes relative to terrestrial ancestors Bryan Fry	Functional diversity of predators drive variable trait- and density-mediated effects on prey life history Jason Bohenek	Accounting for uncertainty: pathogen detection and management of amphibian disease Brittany Mosher	Does mandating mitigation translocations result in conservation benefits? Ox Lennon	Ancestral chytrid pathogen remains hypervirulent following its long co-evolution with amphibian hosts Bruce Waldman	Positive perceptions of the enigmatic Eastern Hellbender Salamander: content analysis of historical to current media Shem Unger
11:45	Ecophysiology predicts the fundamental niche of native and invasive populations of the African Clawed Frog Dennis Rödder			Does size structure in a facultatively paedomorphic predator (<i>Ambystoma talpoideum</i>) alter prey density and diversity? Cy Mott	The importance of scale in amphibian conservation: species responses to fragmentation Staci Amburgey	Is habitat enhancement for reptile conservation a viable strategy in pest-invaded landscapes? Sarah Herbert	Habitat fragmentation reduces genetic diversity and increases susceptibility to infections in frogs of the Brazilian Atlantic Forest Anat Belasen	Overcoming human-herpetofauna conflict using snakebite as a case-study Allwin Jesudasan
11:50								The use of social media to educate and increase awareness of snakes Hiral Naik
11:55								Microscopic and macroscopic photography: bringing the small to the world Mark Smith

Lunch amongst the exhibition Venue: ISB Link Building								
12:00 - 13:00								
12:15 - 12:45	Film: Herpetological Namesakes Venue: Castle 1							
Concurrent sessions	Beyond CTmax & CTmin: Advances in Studying the Thermal Limits of Reptiles & Amphibians	Taxonomy & Phylogenetics 3	New Perspectives on Biology of Sea Snakes		Amphibian Conservation in the Anthropocene – Challenges, Priorities & Solutions for the Human Epoch	Moving Herpetofauna in the Right Direction Part II: Translocations & Tools to Mitigate for Development	<i>Batrachochytrium dendrobatidis</i> 2	Conservation Ecology 1
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
13:00	Factors affecting the thermal tolerance of reptile embryos: lessons from <i>Anolis</i> lizards Joshua Hall	Expedition in search of Asian pit-vipers through China: field survey and systematic study (Viperidae, Crotalinae) Jingsong Shi	The paradox of stenotopy and eurytopy in the Yellow-Lipped Sea Krait, <i>Laticauda colubrina</i> Harold Heatwole		Optimising habitat management for amphibians: from simple models to complex decisions Geoff Heard	Salvage, translocation and radio-telemetry of ngahere geckos (<i>Mokopirirakau</i> 'southern North Island') to Mana Island, NZ Trent Bell	Did Bd-CAPE drive the Kihansi spray toad (<i>Nectophrynoides asperginis</i>) to extinction in the wild? Thomas Sewell	Distribution, occupancy, and habitat associations of grassland-associated reptile and amphibian species in Northwest Arkansas Ethan Royal
13:15	Low embryonic heat tolerance increases vulnerability to climate change in low-latitude lizards Baojun Sun	Phylogenetic relationships in the slug-eater snakes, <i>Duberria</i> (Lamprophiidae) Shelley Edwards	Sea snakes of the Sahul Shelf: spatial temporal changes and threats, 1993 to 2017 Mick Guinea		Understanding probabilities of movement at different scales to inform conservation strategies Erin Muths	Assessing wildlife translocation proposals: the Victorian experience Kim Miller	Understanding limits to recruitment can help inform chytrid fungus mitigation strategies Matt West	Species diversity, distribution and microhabitat preferences of anurans in Mount Kalatungan, Bukidnon, Central Mindanao Philippines Von Carlo Dela Torre
13:30	Behavioral and physiological responses of desert lizards to climate change Weiguo Du	Phylogenetics and undiscovered diversity of the Mexican leopard frogs Anne Chambers	Discussion Harold Heatwole & Kate Sanders		<i>Leiopelma</i> conservation: progress and key uncertainties Phil Bishop	Role of research reintroductions in successful habitat restoration of threatened amphibians Michael Mahony	Associations between the fungal and bacterial microbiomes of frogs, with implications for disease management Donald Mcknight	The contribution of wetland succession to declines of threatened amphibians Angela Burrow
13:45	A new explanation for the evolution of TSD provides broad insight into thermal limits of reptiles Njal Rollinson	Phylogenetic relationship of <i>Cyrtodactylus pulchellus</i> complex in Thailand: implication for taxonomic status Korkwan Termprayoon	Finding needles in haystacks: using niche models to locate previously unknown populations of sea snakes Vinay Udyawer		Conserving Panamanian Harlequin Frogs by integrating captive-breeding and research programs Brian Gratwicke	Outcome bias of auditory survey methods may negatively affect detectability of anurans Alex Callen	Elevated salinity blocks amphibian chytrid transmission and improves host survival: implications for translocations Simon Clulow	Context-dependent effects of non-native vegetation on amphibian development in prairie ecosystems Chelsea Kross
14:00	It's getting hot in here: predicting how diving ectotherms will be impacted by climate warming Essie Rodgers		Integrating underwater surveys, telemetry and citizen science to understand drivers of movement in sea snakes Claire Goiran		Facilitated discussion Evan Grant	Use of photorecognition and habitat manipulation in mitigation and post-development monitoring Liam Russell	A Wildlife Vaccine Campaign: vaccinating amphibians against the chytrid fungus Taegan McMahon	Permanent water body provides micro-refuge for frogs in a fire prone landscape Dean Lenga

<i>Concurrent sessions</i>	Beyond CTmax & CTmin: Advances in Studying the Thermal Limits of Reptiles & Amphibians	Taxonomy & Phylogenetics 3	New Perspectives on Biology of Sea Snakes		Amphibian Conservation in the Anthropocene – Challenges, Priorities & Solutions for the Human Epoch		<i>Batrachochytrium dendrobatidis</i> 2	Conservation Ecology 1
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
14:15	Unraveling the role of body size in thermal maxima <i>Emily Taylor</i>	A global phylogeny of monitor lizards, and the contribution of competition to extreme size disparity <i>Ian Brennan</i>	Evolutionary loss of drinking response in marine snakes <i>Harold Heatwole</i>		Facilitated discussion continued <i>Evan Grant</i>		Survival strategies of the chytrid <i>Batrachochytrium dendrobatidis</i> within and outside its amphibian host <i>Michael San Francisco</i>	Is vegetation mapping a suitable proxy for predicting occupancy of threatened frogs? <i>Grant Webster</i>
14:30	What mechanism sets thermal tolerance in reptiles and amphibians? <i>Rory Telemeco</i>	A new approach to building the amphibian tree of life <i>Ana Serra Silva</i>	Discussion <i>Harold Heatwole & Kate Sanders</i>				Indirect terrestrial transmission of chytrid fungus from reservoir to susceptible host species causes fatal chytridiomycosis <i>Thomas Burns</i>	Conservation status of the world's skinks: geographic and taxonomic patterns in extinction risk <i>David Chapple</i>
14:45	Two tests of the hierarchical mechanisms of thermal limitation hypothesis in lizards <i>Eric Gangloff</i>	What have we learned from the tree of herps? <i>Luke Harmon</i>					Variation of the skin bacterial community and <i>Batrachochytrium dendrobatidis</i> infection in the frog <i>Phyllorhina loveridgei</i> <i>Mariel Familiar</i>	Sister newt species facing landscape changes: comparing key landscape features and resilience patterns <i>Bernardo Antunes</i>
15:00 - 15:30	Afternoon tea amongst the exhibition Venue: ISB Link Building							

Concurrent sessions	Beyond CTmax & CTmin: Advances in Studying the Thermal Limits of Reptiles & Amphibians	Diversity & Distributions 2	Reproductive Biology	Amphibian Disease & Ecology	Amphibian Conservation in the Anthropocene – Challenges, Priorities & Solutions for the Human Epoch	Population Ecology & Monitoring	Behavioural Ecology 4	Adaptation & Evolution 7	
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2	
15:30	Discussion and writing for Special Issue Rory Telemeco	Population trends of European amphibians and reptiles are jointly determined by multiple drivers Mattia Falaschi	The evolution of direct development in Southeast Asian Rhacophoridae (Anura: Rhacophoridae: <i>Philautus</i>) Laurence Etter	A meta-analysis reveals temperature, dose, life stage, and taxonomy influence host susceptibility to <i>Batrachochytrium dendrobatidis</i> Erin Sauer	Facilitated discussion Evan Grant	Latest news of environmental DNA metabarcoding approach for monitoring amphibian species in tropical forests Carla M Lopes	Seasonal dynamics and calling behaviour of the terrestrial-breeding microhylid <i>Cophixalus australis</i> Ross Alford	Biomechanical modeling of turtle jaws: linking brevirostry and edentulism in Testudines Domenic D'Amore	
15:45		What determines the range margins of the Delicate Skink (<i>Lampropholis delicata</i>)? Jules Farquhar	Optimising captive recovery for the critically endangered Baw Baw frog Deon Gilbert	Evaluating environmental-DNA as a tool for detecting an amphibian pathogen using an optimized extraction method Laura Brannelly		Social networking of the Otago Skink (<i>Oligosoma otagense</i>) at Ōrokouui Ecosanctuary Vanitha Elangovan	Diurnal calling behaviour in the nocturnal tūngara frog (<i>Engystomops pustulosus</i>) on Isla Taboga, Panama Heather Gray	Evolutionary trajectories of a shell-adapted respiratory apparatus: the turtle dilemma(s) Markus Lambertz	
15:50						Occupancy modeling as an approach to evaluate effectiveness of conservation translocations in a temperate-zone rattlesnake Jonathan Choquette			
15:55						Conclusions and future directions Evan Grant	The snake that made it back on its own: recolonization by the Puerto Rican Racer Renata Platenberg		
16:00			Ecological and environmental drivers of global diversity patterns in lizards Alex Skeels	Sex or candy? Neuroendocrine mechanisms of seasonal life-history transitions in garter snakes Deborah Lutterschmidt	Behavioral changes throughout the span of <i>Batrachochytrium salamandrivorans</i> (<i>Bsal</i>) infection in various salamander species Gordon Burghardt		High variability in Red Tree Frog advertisement calls may act as buffer to anthropogenic disturbance Brittany Mitchell	The unexpected genetic mating system of a terrestrial breeding toadlet (<i>Pseudophryne coriacea</i>) Daniel O'Brien	Comparative studies of egg tooth development in squamate reptiles Mateusz Hermyt
16:05							Conservation Project: uncovering the well-kept secrets of <i>Lachesis stenophrys</i> ecology Laura Ruysseveldt Bushmaster		
16:10							Using red fox (<i>Vulpes vulpes</i>) behaviour to protect Bell's turtle (<i>Myuchelys bellii</i>) nests in Australia Geoffrey Hughes		

<i>Concurrent sessions</i>	Beyond CTmax & CTmin: Advances in Studying the Thermal Limits of Reptiles & Amphibians	Diversity & Distributions 2	Reproductive Biology	Amphibian Disease & Ecology		Population Ecology & Monitoring	Behavioural Ecology 4	Adaptation & Evolution 7
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
16:15	Discussion and writing for Special Issue continued Rory Telemeco	Climate extremes, variability and trade shape biogeographical patterns of herpetological fauna in the Anthropocene Xuan Liu	How to (un)make a sexy snake: suppression of female pheromone production via steroid action Rocky Parker	Look, that salamander is being eaten alive! Debra Miller		Agricultural intensification driven landscape modification as determinants of herpetofaunal abundance Deyatima Ghosh	Genetic benefits of extreme sequential polyandry in a terrestrial-breeding frog Phillip Byrne	Intertwined evolution of swimming, morphology and microhabitat in tree frogs from the subfamily Hylinae Itzue Caviedes- Solis
16:20				Implementing of environmental DNA detection method in the surveillance of amphibian pathogen <i>Batrachochytrium</i> <i>salamandrivorans</i> David Lastra Gonzalez		Habitat assessment for the reintroduction of the agile frog in a human-dominated landscape Louise Masters		
16:25								
16:30		Cryptic diversity and evolution of Asian horned toads (Megophryidae) Jinmin Chen	Effects of polyandrous mating on fertilization, embryo survival and offspring development in the emerald treefrog Yuan-cheng Cheng			Bioacoustics reveal the calling activity of an endangered frog (<i>Phyllorhina kundagungan</i>) in response to climate David Newell	Sexual dimorphism and reproductive ecology of the South-American rattlesnake, <i>Crotalus durissus</i> in the Brazilian Cerrado María Hoyos	How do lizards run bipedally? On the mechanisms for bipedal locomotion in Australian agamids Nicholas Wu
1635								
16:40							Re-regeneration to reduce negative effects associated with tail loss in lizards James Barr	
16:45 - 17:00	<i>Delegates move to plenary session</i>							
17:00 - 17:45	Keynote: Life on the edge – unlocking the secrets of a Lost World Philippe Kok Venue: St David & Castle 1 (video streamed)							
18:00 - 19:00	Poster session, even poster board numbers presented Venue: The Common Room, ISB Link Building							
19:00 - 20:00	WCH Annual General Meeting & Presentations of Bids to Host WCH10 (all delegates) Venue: Castle 1 & Castle 2 (video streamed)							

Thursday 9 January 2020								
08:00 - 18:00	Registration open Venue: ISB Link Building							
08:30 - 09:15	Keynote: The evolutionary ecology of family living in lizards Geoff While Venue: St Davids & Castle 1 (video streamed)							
Concurrent sessions	Recovering Amphibian & Reptile Species from the Brink of Extinction: Developing Best-Practice Guidelines	Biology of the Frog Family Microhylidae	Conservation Biology 2		Genetic & Genomic methods	Temperature, Moisture & Environmental Change: Conservation Physiology of Lepidosaurs in an Age of Climate Disruption	Taxonomy & Phylogenetics 4	<i>Batrachochytrium salamandrivorans</i>
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
09:30	Better together: collaborative planning in threatened species recovery Sally Wren	Introduction Marta Vidal - Gacia	A review of the conservation status of the Galapagos Islands terrestrial snakes (<i>Pseudalsophis</i> spp) Luis Ortiz-Catedral		Novel, cost efficient and minimally destructive methodology for sequencing mitochondrial genomes of historical museum specimens Stephen Mahony	Modeling incubation microclimates to predict impacts of climate change on embryonic development in tuatara Anna Carter	Detecting selection in urban dragons with a comparison of neutral markers and quantitative trait divergence Nicola Kent	Germany, the hotspot of <i>Bsal</i> emergence Michael Veith
09:45	Archeys frog - an evolutionarily distinct and long-lived terrestrial frog at risk in New Zealand Ben Bell	The past, present, and future of research on Madagascar's microhylids Mark D. Scherz	Stream-riparian forest management for herpetofauna: Beyond Best Management Practices Deanna (Dede) Olson		Benchmarking tissue preservation methods for ultra-high molecular weight DNA and long-read genome sequencing technologies Hollis Dahn	Cellular and whole-organism effects of prolonged vs. acute heat stress in a montane, desert lizard Jeanine Refsnider	Re-assessment of taxonomy and geographic distribution of <i>Fejervarya cancrivora</i> complex from Thailand and nearby countries Siriporn Yodthong	Broad host range of <i>Batrachochytrium salamandrivorans</i> equates to high invasion probability in North America Matthew Gray
10:00	The conservation management of Grand and Otago skinks as a case study James Reardon		Snakebite envenoming and rattlesnake conservation vulnerability zones in the Baja California Peninsula, Mexico Jesús Mauricio Rodríguez Canseco		A non-invasive <i>in situ</i> underwater DNA sampling method applied to the olm (<i>Proteus anguinus</i>) Judit Vörös	Crossroads or tipping points: does thermal melanism hypothesis hold across lizards of different body size? Federico Massetti	Macroevolution and taxonomy of Oriental Brown Frogs (<i>Rana</i> spp.) across the East-Palaearctic Siti Norhidayah Binti Othman	Winter is coming: temperature dependent virulence of <i>Batrachochytrium salamandrivorans</i> Edward Carter
10:15	Restoring the Critically Endangered mountain chicken in the face of chytridiomycosis Jeff Dawson	Analysis of ultraconserved elements supports African origins of narrow-mouthed frogs Jeffrey Streicher	Zoo-led collaboration for conservation: gecko monitoring on Matiu/Somes Island Chye-mei Huang		Surveying frogs from the bellies of their parasites Timothy Cutajar	Upper voluntary thermal limit and water loss in a temperate viviparous gecko: an interactive effect Christian Chukwuka	An Update and Taxonomic Review of Snakes Housed in the Herpetological Collection from Auckland Museum Maria Hoyos	Managing host density and habitat structure could influence contact rates and transmission of <i>Batrachochytrium salamandrivorans</i> Matthew Gray
10:30 - 11:00	Morning tea amongst the exhibition Venue: ISB Link Building							

Concurrent sessions	Recovering Amphibian & Reptile Species from the Brink of Extinction: Developing Best-Practice Guidelines	Biology of the Frog Family Microhylidae	Reproductive Technologies & Biobanking for Amphibian Conservation		Ecology 2	Temperature, Moisture & Environmental Change: Conservation Physiology of Lepidosaurs in an Age of Climate Disruption	Early Detection Rapid Response (EDRR) for Invasive Reptiles & Amphibians	Taxonomy & Phylogenetics 5
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
11:00	How the "World's rarest snake" was saved, and its implications for other endangered Caribbean species Jennifer Daltry	Recent advances on the taxonomy, systematics and biology of cophyline frogs of the genus <i>Plethodontohyla</i> Angelica Crottini	The role of reproductive technologies in amphibian captive breeding programs Aimee Silla		Consequences of keystone plant decline for reptiles in fragmented agricultural landscapes Sara Balouch	Conservatism and plasticity in the ecophysiology of a lizard across a steep environmental gradient Rodrigo Megia-Palma	Mechanisms for coordinating expertise: New Zealand's Island Eradication Advisory Group Keith Broome	A snake in the grass: a molecular study of the widespread genus <i>Psammophylax</i> Chad Keates
11:15	Recovery efforts for the critically endangered Southern Corroboree Frog (<i>Pseudophryne corroboree</i>) Michael McFadden	The biology of the microhylid subfamily Hoplophrynine Simon Loader	Applying assisted reproductive techniques to a multi-year study into biotic factors influencing <i>Necturus</i> captive breeding Steven Sharp		Habitat use by <i>Leiopelma archeyi</i> in disturbed and undisturbed sites on the Coromandel Peninsula, Aotearoa Emily Hotham	Wind speed alters the thermoregulatory behaviour of skinks even when substrate temperature remains constant Jo Virens	New Zealand border and post-border detection and response strategies Dylan Van Winkel	Filling in the phylogenetic gaps: targeted taxon sampling clarifies relationships of Indian agamids and snakes Jeff Streicher
11:30	Rebuilding the endemic reptile community of Gunner's Quoin, Mauritius Nik Cole	Morphological convergence in bouldering frogs Marta Vidal-Garcia	Spermiation and changes in serum hormone levels in the mountain yellow-legged frog, <i>Rana muscosa</i> Natalie Calatayud		Population success of common skinks (<i>Oligosoma polychroma</i>) following mitigation translocation Sydney Dean	Linking physiological and behavioural variation to territory thermal quality and fitness in an African lizard Karla Alujevic	Improving early detection and rapid response for cryptic species: a review of current analytical tools Amy Yackel Adams	Are local molecular clocks misleading? – the case of Mediterranean amphibians Michael Veith
11:45	Empowering communities and new generations in Lake Patzcuaro: the case of Achoque (<i>Ambystoma dumerilii</i>) Gerardo Garcia	Relict distribution of <i>Microhyla</i> in the Ryukyu Archipelago: high diversity in East-Asia maintained by insularization Atsushi Tominaga	Examining variation in sperm response in divergent populations of Red-eyed treefrogs Leah Jacobs		Using monitors to monitor restoration: how does Australia's largest lizard respond to mine site restoration? Sophie Cross	The influence of species assemblages on thermoregulation and habitat use in novel environments Carla Piantoni	Decision analysis for early detection and rapid response: modeling to advance identification of optimal management Staci Amburgey	Inadvertent paralog inclusion drives artefactual topologies and timetree estimates in Lissamphibia Karen Siu-Ting
11:50					<i>Varanus rosenbergi</i> use of spatial habitat, adaptation and social structure Michael McKelvey			
11:55								
12:00 - 13:00	SRARNZ Annual General Meeting (members only) Venue: Castle C							
12:00 - 13:00	Lunch amongst the exhibition Venue: ISB Link Building							
12:15 - 12:45	Film: Herpetologists Past and Present Venue: Castle 1							

Concurrent sessions	Recovering Amphibian & Reptile Species from the Brink of Extinction: Developing Best-Practice Guidelines		Reproductive Technologies & Biobanking for Amphibian Conservation		Adaptation & Evolution 8	Temperature, Moisture & Environmental Change: Conservation Physiology of Lepidosaurs in an Age of Climate Disruption	Early Detection Rapid Response (EDRR) for Invasive Reptiles & Amphibians	Conservation Ecology 2
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
13:00			Nasal GnRH administration elicits sperm production in both Bufonidae and Ranidae Allison Julien		Insights from evolution and biomechanics reveal form-function relationships in reptile eggshells Liliana D'Alba	Discussion Alison Cree	Using environmental DNA sampling to delimit a European newt invasion in Australia Reid Tingley	Spatial ecology of an endangered amphibian <i>Litoria raniformis</i> within modified Tasmanian landscapes Tim Garvey
13:15	The Madagascar ploughshare tortoise programme – between recovery and extinction of an iconic species Matt Goetz		Obtaining gametes by hormonal induction from Australian temperate frog species: differential phylogenetic and sex responses John Clulow		Evolution of skin hydrophobicity in Australian geckos (Diplodactylidae and Carphodactylidae) Jendrian Riedel		Camera traps for early detection and rapid response and management of an invasive reptile Staci Amburgey	Habitat selection and spatial ecology of a hot-spring endemic toad Brian Halstead
13:30	Recovering the white-bellied frog in south-west Western Australia: successes, challenges and the importance of collaborations Kay Bradfield		Development and application of assisted reproductive technologies in several endangered Panamanian amphibian species Gina Della Tagna (via video)		Evolutionary morphology of osteoderms in anguimorph lizards Bryan Minne		Targeted eDNA sampling for cryptic, arboreal snakes based on microhabitat selection Melia Nafus	Braiding data streams: building an Integrated Population Model for the Foothill Yellow-Legged Frog, <i>Rana boylii</i> Jonathan Rose
13:35					Dietary specialisation in fang 3D shape and sharpness of venomous snakes Silke Cleuren			
13:40					Can endocranium shape reveal the sensory ecology of 'aquatic' snakes? Marion Segall			
13:45	Preventing the extinction of two of Australia's most threatened lizards Jon-Paul Emery		Linking <i>in situ</i> and <i>ex situ</i> populations of the Southern Rocky Mountain boreal toad (<i>Anaxyrus boreas boreas</i>) Cecilia Langhorne		Recent studies of adrenal enlargement in toad-eating snakes Alan Savitzky	Strategy and tool development for invasive plague skinks (<i>Lampropholis delicata</i>) on Aotea, Great Barrier Island Jaqui Wairepo	Effect of male phenotype and nest quality on mating success in the northern corroboree frog Shannon Kelleher	
14:00	Discussion Jeff Dawson		Refinement of spermatozoa cryopreservation techniques in <i>Ambystoma tigrinum</i> for salamander conservation and management Amanda Gillis			Rapid assessment of eradication success of an invasive lizard Marlene Baling	Niche partitioning as a mechanism for the coexistence of pygmy bluetongue lizards and burrowing spiders Jessica Clayton	

Concurrent sessions	Recovering Amphibian & Reptile Species from the Brink of Extinction: Developing Best-Practice Guidelines		Reproductive Technologies & Biobanking for Amphibian Conservation		Adaptation & Evolution 8		Early Detection Rapid Response (EDRR) for Invasive Reptiles & Amphibians	Conservation Ecology 2
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
14:15	Discussion continued Jeff Dawson		Generation of amphibians from cryopreserved sperm: proof of capacity for development beyond metamorphosis Rose Upton		Limb reduction in skinks (Squamata: Scincidae): a comparative analysis based on morphological literature Marco Camaiti		Two contrasting incursions of <i>Lampropholis delicata</i> in New Zealand's South Island Rod Hitchmough	Population genetics of timber rattlesnake populations in Northeastern United States Anne Stengle
14:30			Linking <i>in situ</i> and <i>ex situ</i> populations of threatened amphibians using the National Amphibian Genome Bank Carrie Vance		Longevity is not influenced by metabolic rates across the vertebrate tree of life Gavin Stark		Rapid eradication tool testing for invasive amphibians: <i>Duttaphrynus melanostictus</i> in Madagascar James Reardon	Using environmental DNA to map winter hibernacula in temperate freshwater turtles Wenxi Feng
14:45			Putting the ARTs into practice: emerging opportunities and priorities for the application of amphibian ARTs Simon Clulow				Controlling cane toads with traps: what have we learned? Lin Schwarzkopf	Site occupancy and eDNA concentrations of eastern hellbender (<i>Cryptobranchus a. alleganiensis</i>) in a large river Mizuki Takahashi
15:00 - 15:30	Afternoon tea amongst the exhibition Venue: ISB Link Building							
Concurrent sessions		Captive Breeding	Reproductive Technologies & Biobanking for Amphibian Conservation	Physiology & Reproductive Biology	Invasion & Disease Ecology	Diversity & Distributions 3	Early Detection Rapid Response (EDRR) for Invasive Reptiles & Amphibians	Conservation Ecology 3
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
15:30		Applying SNP-derived genotyping to the captive management of the endangered Mountain Yellow-legged frog Natalie Calatayud	Status of the U.S. National Amphibian Genome Bank and future efforts to conserve anuran biodiversity Andrew Kouba	Breadth of the thermal response captures individual and geographic variation in temperature-dependent sex determination Anna Carter	Cattle and Spears: damages of an uninvited guest to the Mediterranean herpetofauna Roy Talbi	Synopsis of the amphibians from a poorly surveyed African country: Equatorial Guinea Ignacio De La Riva	Alpine newt delimitation, containment and eradication strategies Dylan Van Winkel	Is individual variation in growth rates relevant to population dynamics of long-lived reptiles? Doug Armstrong
15:45		Cost-effective amphibian captive breeding using biobanking to meet IUCN 100-year, 90 percent heterozygosity criteria Lachlan Howell	Discussion session: developing a global strategy for amphibian biobanking Aimee Silla & Natalie Calatayud	Timing is critical when inducing oviposition in turtles Mark Feldman		Combining micro- and macrohabitat analyses to understand niche evolution in European cave salamanders Gentile Francesco Ficetola	The Asian Toad in Madagascar, when EDRR fails Karen Freeman	Conservation of Miyako grass lizard, <i>Takydromus toyamai</i> : life history traits, population genetics, and conservation measures Mamoru Toda

Concurrent sessions		Captive Breeding	Reproductive Technologies & Biobanking for Amphibian Conservation	Physiology & Reproductive Biology	Invasion & Disease Ecology	Diversity & Distributions 3		Conservation Ecology 3		
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2		
16:00		Habitat choice of hatchling Murray River Turtles (<i>Emydura macquarii</i>): informing headstarting programmes Claudia Santori	Discussion session: developing a global strategy for amphibian biobanking continued Aimee Silla & Natalie Calatayud	Thermal plasticity in metabolic physiology in a widespread Australian lizard Daniel Noble	Preliminary analysis on network-scale effects of invasive species on spatially-structured amphibian populations Raoul Manenti	Implications of continuous amphibian diversity monitoring in Daweishan of tropical SE Yunnan, China Jian Wang				
16:05				Time of year affects study of gut microbiota of the lizard <i>Sceloporus consobrinus</i> (Phrynosomatidae) Mark Paulissen						
16:10						Sexual dimorphism in external and skeletal morphology of Japanese lentic breeding salamander (Amphibia: Urodela: Hynobiidae) Sotaro Hara				
16:15		Behavioural observations of the Bermuda Skink <i>Plestiodon longirostris</i> in captivity: informing in-situ and ex-situ conservation Gerardo Garcia				Genomic and transcriptomic investigations of the evolutionary transition from oviparity to viviparity Wei Gao	The potential for artificial selection in a reintroduction program: exploring individual variation in chytridiomycosis susceptibility Luke Linhoff			Populational dynamics of the stream-dwelling frog <i>Boana paaju</i> in Southern Brazil Sophia Kusterko Novaes
16:20							The invasion of the Asian Toad in Madagascar Angelica Crottini			
16:25					The source of reptile and amphibian pandemics in the Anthropocene Jonathan Kolby					

<i>Concurrent sessions</i>			Reproductive Technologies & Biobanking for Amphibian Conservation	Physiology & Reproductive Biology	Invasion & Disease Ecology			
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
16:30			Discussion session: developing a global strategy for amphibian biobanking continued Aimee Silla & Natalie Calatayud	Superior start to life? Effect of carotenoids on the growth and development of corroboree frogs Emma McInerney	Incubation temperatures and intestinal length, are they telling us something about sea turtle hatchling survival? Debra Miller			
16:35								
16:45 - 17:00	<i>Delegates move to plenary session</i>							
17:00 - 17:45	Keynote: Sending them south: appraising assisted colonisation of reptiles threatened by climate change Nicki Mitchell Venue: St David & Castle 1 (video streamed)							
19:00 - 23:00	Congress dinner (ticketed event) Venue: Dunedin Town Hall, 1 Harrop Street (Please make your own way to and from the Dunedin Town Hall)							

Friday 10 January 2020								
08:00 - 18:30	Registration open Venue: ISB Link Building							
08:30 - 09:15	Keynote: Using an integrative approach to explore the diversity and evolution of amphibians and reptiles in the Qinghai-Tibetan Plateau Jing Che Venue: St David & Castle 1 (video streamed)							
Concurrent sessions	Adaptation, Evolution & Genetics	Physiology & Ecotoxicology	Host-Parasite Ecology		Amphibian Conservation Research Symposium (ACRS)	Social behaviour	Taxonomy & Phylogenetics 6	Improving the Interface between Research and Management for Conservation of New Zealand Reptiles & Frogs
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
09:30	Adaptation and evolution of Tiger Snakes Vicki Thomson	A Curly Tale: stress and immunity across nonnative populations of differing ages in <i>Leiocephalus carinatus</i> Natalie Claunch	Cool or not to cool? Intestinal coccidians disrupt the thermoregulatory response to tick infestation Rodrigo Megía-Palma		The global effort to conserve amphibians under threat Phil Bishop	Aggressive behaviors and their effect on resource use by female Little Brown Skinks, <i>Scincella lateralis</i> Mark Paulissen	Origins of lizard diversity in the continental island of Sri Lanka: insights from scincid lizards Kanishka Ukwela	Tuatara conservation through Māori involvement in policy Louisa Paul
09:45	Repeated evolution of insular dwarfism across three reptile species with population and functional genomic insights Tonia Schwartz	Impacts of locust control pesticides on the physiology and behaviour of the central bearded dragon Isabella Contador-Kelsall	Enteric bacteria in sleepy lizards vary in richness, prevalence and co-occurrence patterns Ko-Huan Lee		World's largest tropical island may provide refuge from the amphibian chytrid fungus <i>Batrachochytrium dendrobatidis</i> Deborah Bower	Social tactics and dominance relationships in a long-lived reptile, the eastern water dragon, <i>Intellegama lesueurii</i> Coralie Delme	Peacocks of the lizard world: phylogeny and taxonomy of the spectacular African flat lizards (<i>Platysaurus</i>) Mitzy Pepper	Conservation management of New Zealand frogs Amanda Haigh
10:00	Determinants of phenotypic and genetic variation along a latitudinal gradient in a widespread amphibian Anssi Laurila	Radiocesium accumulation and spatial ecology of rat snakes (<i>Elaphe</i> spp.) in Fukushima Japan Hannah Gerke	Testing a mechanistic hypothesis: how does climate predict the distribution of parasites in lizards? Rodrigo Megía-Palma		How to find a frog in forest - can detection dogs be used for conservation? Deon Gilbert	Contrasting sociality in two sympatric skink species: <i>Oligosoma otagense</i> and <i>O. grande</i> Penny Jacks	Species delimitation, phylogenetic relationships and biogeography of <i>Hemiphyllodactylus</i> (Reptilia: Gekkonidae) in Yunnan Karsts Ade Prasetyo Agung	Research priorities for lizard conservation in New Zealand James Reardon
10:15	Examining Spotted Marsh Frog <i>Limnodynastes tasmaniensis</i> call races using large-scale citizen science data Kathy Potter	Using stable isotopes to investigate trophic transfer of mercury and radiocesium in <i>Nerodia floridana</i> Melissa Pilgrim	Prior pathogen exposure and a preliminary vaccine increase amphibian resistance to chytridiomycosis Anthony Waddle		Victory against all odds: the successful conservation story of the Admirable Red-Belly Toad in Brazil Michelle Abadie	Social behaviour in a stable population of McCann's Skinks <i>Oligosoma maccanni</i> in a rural garden Jan Kelly	The tenses of existence of the skink <i>Eugangylus rufescens</i> (Shaw, 1802) (Scincidae) Glenn Shea	Conservation progress for critically endangered lizard taxa in Aotearoa/New Zealand Jo Monks
10:20								
10:30 - 11:00	Morning tea amongst the exhibition Venue: ISB Link Building							

Concurrent sessions	Herps in the City: Mechanisms of Responses to Human-Induced Environmental Change	Disease Ecology (pathogens)	Amphibian Genome Assembly & Evolution		Amphibian Conservation Research Symposium (ACRS)	Sociality of Amphibians & Reptiles	Ecology (Nesting & Incubation)	Improving the Interface between Research & Management for Conservation of New Zealand Reptiles & Frogs
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
11:00	The use of community science to study the ecology of herpetofauna in cities Bree Putman	World Wide Web portals for herpetofaunal pathogen data Deanna (Dede) Olson	Polyploidy and adaptation in Australian burrowing frogs <i>Neobatrachus</i> Polina Novikova		Understanding why endangered frogs survive or perish on a tiny scale Emily Hoffmann	Scaly sociality: testing for the presence of kin-based sociality in Australian and African Lizards Julia Riley	The effect of constant egg incubation temperatures across life stages in the brown anole Jenna Pruett	Conservation of Nationally Critical Chesterfield skinks in situ – a response to changing climate and risks Lynn Adams
11:15	Bold New World: urbanisation promotes an innate behavioural trait in a lizard James Baxter-Gilbert	Emerging or enzootic? Disruption of long-term host-pathogen dynamics Gonçalo Rosa	Sequencing and annotation of the Western Spadefoot toad (<i>Pelobates cultripes</i>) Ivan Gomez-Mestre		Saving cows, saving frogs: if you love amphibians, you should care for farm animals too Luis Fernando Marin da Fonte	Testing for the presence of kin-based sociality in Midland Painted Turtles (<i>Chrysemys picta marginata</i>) Carter Rouleau	The embryos of turtles can influence their own sexual destinies Yinzi Ye	NZ conservation management of Data Deficient and Data Poor lizard taxa: progress, challenges, future directions Carey Knox
11:20				Social tolerance behaviour in a reptile, the Eastern water dragon (<i>Intellagama lesueurii</i>): a new perspective Coralie Delme				
11:25						Aggregative behaviour in New Zealand's native lizards Stephanie Godfrey		
11:30	City life alters the gut microbiome and stable isotope profiling of eastern water dragons Nicola Kent	Identification of divergent serpentoviruses in free-ranging invasive pythons in southern Florida, United States Steven Tillis	Assembling the <i>Rana temporaria</i> genome to inform the evolution of Anuran sex chromosomes Daniel Jeffries		Reproductive habitat use of endangered <i>Minervarya greenii</i> (Amphibia: Dicroglossidae) in montane cloud forests of Sri Lanka Meegamage Chamara Prabath	Does temperature mediate social conflict in a family-living skink? Geoff While	Nest-site selection and hatchling success of box turtles (<i>Terrapene carolina</i>) at their northern range limit Joseph Altobelli	
11:35						Q & A Julia Riley		
11:45	One hundred years of urbanisation makes an endangered species of Canberra's Grassland Earless Dragon Stephen Sarre	Species-dependent amplification of <i>Ranavirus</i> prevalence and infection severity in multi-host amphibian communities David Lesbarrères	Genomic and transcriptomic insights into the molecular basis of sexually dimorphic spines in <i>Leptobrachium leishanense</i> Jun Li		A primer of amphibian research and conservation in Pakistan: current situation and the way forward Muhammad Rais (via video)	The role of spatial structure on the social dynamics of the estuarine crocodile <i>Crocodylus porosus</i> Cameron Baker	Incubation temperature affects the color expression and embryonic development of a terrestrial salamander Annette Evans	Captive management for conservation – <i>ex situ</i> interventions past, present and future Richard Gibson
12:00 - 13:00	WCH Executive Meeting (members only) Venue: St David A & B							
12:00 - 13:00	Lunch amongst the exhibition Venue: ISB Link Building							

Concurrent sessions	Herps in the City: Mechanisms of Responses to Human-Induced Environmental Change	Physiology 1	Amphibian Genome Assembly & Evolution		Amphibian Conservation Research Symposium (ACRS)	Sociality of Amphibians & Reptiles	Adaptation & Evolution 9	Improving the Interface between Research & Management for Conservation of New Zealand Reptiles & Frogs
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
13:00	Impacts of translocation on a large urban-adapted venomous snake Bill Bateman	The neglected pervasive stressor: long-term effects of short-term exposure to UV radiation in Green Tree Frogs Niclas Lundsgaard	The axolotl genome Siegfried Schloissnig		Research to conservation practice through Durrell's SAFE Strategy 2014-2020 Jeff Dawson	Social structure of the Spiny-Tailed Iguana, <i>Ctenosaura similis</i> : network, personality, and genetic relatedness Ann-Elizabeth Nash	Plasticity allows colonization, and adaptation leads to incipient speciation in a fire salamander population Joana Sabino Pinto	Enhancing conservation management of New Zealand's lizards – the relevance of laboratory-based studies Alison Cree
13:15	Thermoregulation strategy of the invasive Asian House Gecko (<i>Hemidactylus frenatus</i>) Yingyod Lapwong	Anuran larvae exhibit lower upper thermal limits and warming tolerance than a natural predator Gustavo Adolfo Agudelo Cantero	Improving and using a chromosome-scale assembly of the enormous (32 Gb) axolotl genome Jeremiah Smith		Climate change impacts on amphibians in Madagascar: shifts to higher elevation and increased risks of extinction Christopher Raxworthy	Parental care by male Japanese giant salamanders – a note on a partially small den-master found in an upstream section Sumio Okada	Intraspecific differentiation and speciation in three viviparous <i>Phrynocephalus</i> lizards in the northeastern Qinghai-Tibet Plateau Yi-jing Chen	A translocated population of tuatara (<i>Sphenodon punctatus</i>) in a cool southern ecosanctuary: are females nesting? Jemima Gardiner-Rodden
13:30	Surviving in the Suburbs: the Gibbs line and amphibian conservation David Skelly	Comparative study on antioxidant defense responses to ammonia stress in three fresh water turtle species Cuijuan Niu	Caecilian genomes Mark Wilkinson		Population assessment and distribution of the Madagascan golden mantella in the face of climate change Richard Griffiths	Social complexity drives the evolution of display complexity in agamid lizard <i>Phrynocephalus przewalskii</i> from China Yin Qi	Roles of isolation, secondary contact, and ecology in diversification and speciation of a temperate frog Stephen Loughheed	Responses of arboreal geckos to sanctuary management in pest-invaded environments of New Zealand Trent Bell
13:45	Urbanization modulates mating signals and antipredatory strategies in a neotropical frog Ximena Bernal	Sex differences in kidney gene expression: reproductive costs of the renal sexual segment? Christopher Friesen	The identification of sex-linked markers in the vulnerable Green and golden bell frog, <i>Litoria aurea</i> Jarrold Sopniewski		Confronting amphibian diseases: frontiers in effective mitigation Molly Bletz	Chemically mediated self and social recognition in juvenile Common Gartersnakes (<i>Thamnophis sirtalis</i>) Gordon Burghardt	Is competition causing character displacement and niche segregation in a radiation of cryptic species? Octavio Jimenez-Robles	Community efforts to re-establish grand and Otago skinks, and jewelled geckos, in modified shrub/grassland ecosystems Grant Norbury

Concurrent sessions	Herps in the City: Mechanisms of Responses to Human-Induced Environmental Change	Physiology 1	Amphibian Genome Assembly & Evolution		Amphibian Conservation Research Symposium (ACRS)	Sociality of Amphibians & Reptiles	Adaptation & Evolution 9	Improving the Interface between Research & Management for Conservation of New Zealand Reptiles & Frogs
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
14:00	Green infrastructure from urban sinks to prestigious pads for frogs David O'Brien	Effects of maternal diet on reproduction and development in turtles James Van Dyke	Differential introgression across newt hybrid zones: evidence from replicated transects Gemma Palomar		DNA-based methods for monitoring pond-breeding amphibians: the case of the Natterjack toad in Ireland Marina Reyne	<i>Allobates femoralis</i> : an optimal model species for studying anuran social behavior and cognition Walter Hödl	Premating reproductive isolation between allopatric populations promoted by reproductive character displacement in geckos Teppel Jono	Discussion Jo Monks & Alison Cree
14:15	Superfrogs in the city – impact of urbanity and agriculture on the morphology of frogs Stephanie Niemeier	Regional characteristics of toxic components in Japanese toads Takato Inoue			The critically endangered Titicaca water frog: Bolivia and Peru conservation efforts Teresa Camacho Badani	Where squamate sociality reaches its peak: <i>Egernia stokesii</i> research past, present and future Mike Gardner	Cryptic and failed speciation in Sulawesi flying lizards (<i>Draco</i>) 1: phylogenetics and species delimitation Jimmy McGuire	
14:30	Road avoidance and its energetic consequences for reptiles James Paterson	Through the heart: ventricular septum and cardiac conduction system across Sauropsida Martina Gregorovicova			Longwall mining and amphibian populations – a case study Samanatha Wallace		Cryptic and failed speciation in Sulawesi flying lizards 2: evidence for mito-nuclear Dobzhansky-Muller incompatibilities Alexander Stubbs	
14:45	The Brisbane Python Project: how mitigated translocations potentially affect urban pythons in Brisbane Chantelle Derez	Spatio-temporal architecture of pancreatic islets in grass snake embryos Magdalena Kowalska			Antibiotic susceptibility profiles of <i>Salmonella</i> species isolated from captive amphibians and reptiles in Uganda James Watuwa (via video)		Genetic diversity and mito-nuclear discordance in Neotropical toads (<i>Rhinella</i>) Danielle Rivera	
14:50					ACRS discussion session			
Afternoon tea amongst the exhibition Venue: ISB Link Building								
Concurrent sessions	Herps in the City: Mechanisms of Responses to Human-Induced Environmental Change				Ecophysiology 3	Taxonomy & Phylogenetics 7	Human Impacts	Host-Parasite & Disease Ecology
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
15:30	Hooked on humans? <i>Daboia palaestinae</i> in reptile assemblages in natural versus anthropogenic habitats in Israel Boaz Shacham				Salt tolerance in frogs: a widespread trait conferring adaptive capacity for global change? Craig Williams		Scales, tails, and trails: a review of recreational effects on reptiles and amphibians Samantha Dean	Of poisons and parasites—the defensive role of tetrodotoxin against infections in newts Amber Stokes

Concurrent sessions	Herps in the City: Mechanisms of Responses to Human-Induced Environmental Change				Ecophysiology 3	Taxonomy & Phylogenetics 7	Human Impacts	Host-Parasite & Disease Ecology
Venue	St David	St David A & B	St David E	St David F	Castle 1	Castle 2	Burns 1	Burns 2
15:45	The bioaccumulation of contaminants across an urban gradient in a wetland snake (<i>Notechis scutatus</i>) Damian Lettoof					Evidence for ancient hybridization between the Komodo dragon and Australian monitor lizards Carlos Joaquín Pavón Vázquez	Impacts of agriculture and roads on amphibians in the Prairie Potholes of Manitoba, Canada Pamela Rutherford	Threat assessment of <i>Taruga eques</i> (Amphibia: Rhacophoridae) endemic on the tropical island of Sri Lanka Meegamage Chamara Prabhath
16:00	A ten-year study of an urban turtle metapopulation Mark Mills				Integrating spatial and temporal studies to model salamander demographic responses to climate John Maerz	The undescribed frog diversity of the Australian Monsoonal Tropics Renee Catullo	The New Caledonian Leopard Skink <i>Lacertoides pardalis</i> : ecology and conservation in a mining context Matthias Deuss	Disease and disturbance: investigating the factors that drive amphibian reservoir host occurrence and distribution Danielle Wallace
16:15	Sex in the city: urbanization broadens the reproductive season of lizards Joshua Hall				The global diversity and distribution of lizard clutch sizes Shai Meiri	Revisiting phylogenetic problems of Huia (Amphibia, Ranidae): which one is the true Huia? Umilaela Arifin	Diversion mini-hydropower plants in the Balkans and impact on local amphibian (and reptile) populations Jelka Crnobrnja-Isailović	Parasites of invasive amphibians and where to find them Hsuan-wien Chen
16:30	Nestled in the city: nesting behaviour enhances embryo survival in urban areas Sarin Tiatragul				How does incubation temperature affect behaviour, physiology and growth in delicate skinks? Madeleine Jong	Dalmatian oddities: functional divergence of head shape in lizards on two peculiar islands in the Adriatic Simon Baeckens	Effects of urbanisation and hydrological change on a freshwater turtle Anthony Santoro	Does malaria mediate the reliability of testosterone and dewlap coloration of <i>Anolis sagrei</i> ? Jhan-Wei Lin
16:45	<i>Delegates move to plenary session</i>							
17:00 - 17:45	Keynote: Atlantic forest herps and their responses to environmental shifts: past, present, and future Ana Carnaval Venue: St David & Castle 1 (video streamed)							
17:45 - 18:00	Closing ceremony and awards (all delegates) Venue: St David & Castle 1 (video streamed)							
Saturday 11 January 2020								
09:45 - 14:45	Orokonui Ecosanctuary fieldtrip (ticketed event) Venue: Please meet in the ISB Link Building							
08:00 - 19:00	Otago Peninsula coastal walk fieldtrip (ticketed event) Venue: Please meet in the ISB Link Building							