DRAFT PROGRAM - 20 August (subject to change); PLENARY = ~45+10'; Oral = 15+5'; P+3' = Speed talk plus poster

Monday 1st September (0800-1745); Welcome Reception 1800-1900h); POSTERS from 1200h

Managing overabundant rodents

| Steve Henry | Australia | PLEN | Listening to farmers to improve house mouse management |
|---|-------------|------|--|
| Matthew Rees | Australia | Oral | Forecasting mouse plagues in Australian grain growing regions |
| Jim Hone | Australia | Oral | In wildlife conservation and pest control, do management efforts cause the observed outcomes and show diminishing returns? |
| Peter Banks | Australia | Oral | Improving rodent trap success using information decoys |
| Dave Forsyth | Australia | Oral | Population dynamics of the non-native house mouse (<i>Mus musculus</i>) in pasture—cropping systems, New South Wales, Australia |
| Nyo Me Htwe | Germany | Oral | Population dynamics of rodents in Southeast Asian rice fields and their association with rainfall changes |
| Roman Fornesa | Philippines | Oral | Evaluating the effectiveness of relative abundance techniques (RATs) for monitoring rodent abundance and predicting rodent damage in rice agroecosystems in the Philippines |
| Hashani Jayaweera | Sri Lanka | Oral | A comparative study on the trapping efficiency of five different types of traps for rice field rodents in Sri Lanka |
| Ryoko Koizumi | Japan | Oral | Understanding the behaviour of black rats: year-round diel activity pattern and trap responses on a livestock farm |
| Junhu Su | China | Oral | Outbreak mechanisms and prevention methods of a subterranean rodent in the eastern margin of Qinghai-Tibet Plateau |
| S.R. Sarathchandra | Sri Lanka | Oral | A study on Bg 403 rice variety as a trap crop on the management of <i>Bandicota bengalensis</i> (Lesser Bandicoot Rat) in rice cultivation, Sri Lanka |
| P-1: Ryan Sarre | Australia | P+3' | Rapid assessment of mouse abundance across Australia to predict house mouse outbreaks |
| P-2: Jared Trask | USA | P+3' | PESTMAP: Development of an Agent Based Model to simulate rodent movements in agricultural settings |
| P-3: Todisoa Radovimiandrinifaran y | Madagascar | P+3' | Preferred habitat and reproduction of introduced small mammals (<i>Mus musculus</i> , <i>Rattus rattus</i> and <i>Suncus murinus</i>) in rural villages of Analavory, highland of Madagascar |

| P-4: Soanandrasana | | | |
|--------------------|------------|------|---|
| Rahelinirina | | | Rodent mobility within vulnerable urban socio-ecosystems: a study in |
| (Randrianirina) | Madagascar | P+3' | Antananarivo, Madagascar |
| P-5: Nyo Me Htwe | | | Improving effectiveness in the management of Norway rats through adaptations of |
| (Huels) | Germany | Р | non-chemical alternative |

Physiology

| Hanyi Zhu | China | Oral | Gut microbes mediate rodent responses to environmental change |
|----------------------|-------|------|---|
| | | | Dietary shift caused dramatic diversity loss and instability of gut microbiota in Brandt's |
| Chaoyuan Cheng | China | Oral | vole |
| Jianshi Jin | China | Oral | Profiling the microbiota of wild rodents through high-throughput single-cell analysis |
| Zhenlong Wang | China | Oral | Fuel source shift or cost reduction: Context-dependent adaptation strategies in closely related <i>Neodon fuscus</i> and <i>Lasiopodomys brandtii</i> against hypoxia |
| | | | GDF15 Up-regulation in Brandt's voles hippocampus under acute hypoxia: driving |
| Qinghua Li | China | Oral | metabolic reprogramming |
| P-6: Dawei Wang | | | |
| (Hilal) | China | P+3' | Variations in microbial function along density gradients in soil and the Brandt's vole's gut |
| | | | Gut microbiota are potentially involved in the postnatal development and photo- |
| P-7: Dawei Wang | | | refractoriness of gonadal activity under different photoperiodic exposure in male Brandt's |
| (Wang) | China | P+3' | vole |
| | | | Studies on the role of microglia in hypoxic injury of hippocampi of Lasiopodomys |
| P-8: Qinghua Li (Lu) | China | P+3' | brandtii |
| P-9: Zhenlong Wang | | | |
| (Song) | China | P+3' | Molecular Mechanism of Timp2 mediated Liver Hypoxia Tolerance in Brandt's Voles |

Tuesday 2nd September (0800-1800h)

Human-wildlife interactions

| Belmain | UK | PLEN | Putting rodents at the centre of One Health programmes - lessons and experiences |
|------------------|-----------|------|--|
| Himsworth | Canada | PLEN | From data to knowledge to wisdom: lessons learned from the Vancouver Rat Project |
| Costa | Brazil | PLEN | Rodent management in urban landscapes – developing country perspectives |
| Katherine August | UK | Oral | Invasive species management strategies in a One Health system |
| Ko-Huan Lee | Australia | Oral | Disease profiling of mouse populations in grain cropping regions of Australia |

| Herwig Leirs | Belgium | Oral | Rodentgate: future rodent management for pig and poultry health |
|---|------------|------|--|
| Juan José Luque- | | | Cyclic common vole populations drive recurrent risk of tularemia in mediterranean |
| Larena | Spain | Oral | farmland |
| Algimantis | | | Rodents and their role in zoonotic disease transmission in a highly endemic European |
| Paulauskas | Lithuania | Oral | zone |
| Vincent Sluydts | Belgium | Oral | Drivers of host-pathogen community assemblies in European forests and urban green spaces |
| Marina Voinson | Belgium | Oral | Rodent-borne pathogen dynamics and control in agricultural environments: an ecoepidemiological modeling approach |
| Voahangy Soarimalala | Madagascar | Oral | Ecological and zoonotic impacts of <i>Rattus rattus</i> in Madagascar: evidence from repeated trapping across diverse habitats |
| Noh Ismail | Singapore | Oral | Environmental risk factors and hotspot identification for rat activity in Singapore |
| Yan Zhuang | Singapore | Oral | Urban rats, hidden threats: direct genotyping of <i>Leptospira</i> using a multi-locus sequence typing approach |
| Soanandrasana Rahelinirina | Madagascar | Oral | Zoonotic risk at the edge: plague and leptospirosis in rodent populations in rural Madagascar 2022 - 2024 |
| Egidius Rwebuga | Tanzania | Oral | Structure of small mammal communities in agricultural land and communally protected forest within a plague focus in Karatu District, Tanzania |
| Carly Hilbert | Canada | Oral | Mapping the harms of urban rats: a scoping review of social, economic and health impact |
| Yukun Kang (Evol biol) | China | Oral | Genetic differentiation and interspecific gene introgression in Myospalacinae: a study from grassland ecosystems on the Qinghai-Tibet Plateau |
| P-10: Pauline Van Leeuwen | Belgium | P+3' | Microbiome insights into zoonotic risk at wildlife-human interfaces in a transitioning landscape in Thailand |
| P-11: Soanandrasana Rahelinirina (Andrianarisoa) | Madagascar | P+3' | Rickettsial diseases as an under-documented infectious risk in disadvantaged urban areas: a case study in an observatory site in Antananarivo, Madagascar. |
| P-12: Herwig Leirs (Marien) | Belgium | P+3' | Biodiversity changes in African forests and the emergence of infectious diseases: should we worry? |

| P-13: Federico Costa (Awoniyi) | Brazil | P+3' | Improving urban rodent management through movement assessment in high-risk communities |
|-----------------------------------|------------|-----------------|---|
| P-14: Carly Hilbert | Canada | P+3' | From rat counts to risk counts: applying the Rat Risk Index to urban rodent management in Richmond, British Columbia |
| P-15: Mino Rajerison/ | | | |
| Soanandrasana Rahelinirina | Madagascar | Oral or P+3' | Plague in small mammals from an endemic focus of the Malagasy Central Highlands: A longitudinal survey with a special reference on black rats (Rattus rattus) |

| Wednesday 3rd Sept | Wednesday 3rd September (0830-1300); Half day field trip (1400-1830) | | | | |
|------------------------|--|------|---|--|--|
| Emerging technologies | | | | | |
| Paul Thomas | Australia | PLEN | Developing CRISPR gene drives for invasive rodent population suppression | | |
| Kevin Oh | Australia | Oral | Toward translation of the world's first murine gene drive: from laboratory proof-of-concept to island deployment | | |
| Aysegul Birand | Australia | Oral | Evaluating the eradication potential of gene drives in invasive mice and rat populations | | |
| Chloe Faulks | Australia | Oral | Mouse surveillance case study using an autonomous sensing platform | | |
| Charles Eason | New Zealand | Oral | Advancing the registration of norbormide as an alternative to broad-spectrum rodenticides | | |
| Xiao-Hui Liu | China | Oral | Application of seasonality in designing and optimizing the data acquisition framework for rodent pest monitoring and early warning | | |
| Dawei Wang | China | Oral | Application of intelligent monitoring technologies for wild rodents in agro-pastoral ecosystems in China: current status and development trends | | |
| Neena Singla | India | Oral | Nano-encapsulation of fertility control agents: a game-changer for long-term oral contraception in rodents | | |
| P-16 Dimple Mandla | India | P+3' | Tiny particles, big impact: extended reproductive suppression via Quinestrol nanobait | | |
| P-17: Mathea Michie | Australia | P+3' | Establishing a wild house mouse colony to support translational research for gene drive | | |

Thursday 4th September (0830-1730)

Social attitudes and knowledge

| Flor | Cambodia | PLEN | Scaling op rodent management: leveraging stakeholder networks, communication strategies, and innovative solutions |
|-----------------|-----------|------|---|
| | | | Recognising the multiple, interrelated human and social impacts of an Australian mouse |
| Lucy Carter | Australia | Oral | plague |
| Aditi Mankad | Australia | Oral | A model of psychosocial impacts during the 2021 NSW mouse plague |
| Walter Okelo | Australia | Oral | The economic impact of the 2021 NSW mouse plague |
| | | | Living with mice: Perspectives on mice and mouse management from a South Australian |
| Rebecca Paxton | Australia | Oral | community case study. |
| | | | Pestilence and Power: Rat Control, Identity Formation, and Statecraft across Bermuda, |
| Sydney Newell | USA | Oral | Virginia, and New York City |
| | | | Walking towards EBRM within poor urban settings: a comparative analysis of Knowledge, |
| Karmadine Hima | Niger | Oral | Attitudes and Perceptions on rodent issues in Benin, Madagascar and Niger |
| P-18: Karmadine | | | Biological invasions of rodents in West Africa: Introducing the Wan@bi Network as |
| Hima | Niger | P+3' | a multi-stakeholder science-society interface tool |

Thursday 4th September (0830-1730) (continued)

Evolutionary biology (parallel session)

| | | | Integrative taxonomy reveals diversity of commensal rodents and their co- occurrence with non-commensal small mammals in urban and agricultural |
|----------------|--------------|------|--|
| Zandile Fakude | South Africa | Oral | habitats in the eastern Free State |
| | | | Spread of a single anticoagulant resistance Vkorc1 haplotype in Asian house rats across |
| Ying Song | China | Oral | China |
| | | | From traps to maps: Integrating optimized habitat and distribution modelling to |
| Diane Castillo | | | advance ecologically rodent based management in the Philippines, with special |
| (MOR) | Philippines | Oral | reference for Rattus species |
| Willilam Breed | Australia | Oral | The reproductive biology of Australian hydromyine rodents |
| Wieteke | | | Failed mouse eradication on Sand Island: a case of novel rodenticide resistance? |
| Holthuijzen | USA | Oral | Falled mouse eradication on Sand Island: a case of novel rodenticide resistance? |
| | | | The genetic structure of semi-commensal rodents in urban areas (an example of the |
| Alexey Surov | Russia | Oral | common hamster) |

| | | | Genetic structure and parasitic load of striped field mouse (Apodemus agrarius) in a |
|---------------------|--------------|------|--|
| Natalia Feoktistova | Russia | Oral | megacity |
| Lehlohonolo | | | Ectoparasite communities of small mammals from different habitats in the eastern |
| Mofokeng | South Africa | Oral | Free State, South Africa |
| P-19: Yan Zhuang | | | From whiskers to DNA: unravelling Rattus diversity and its implications for urban |
| (Sena Neves) | Singapore | P+3' | management in Singapore |
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Thursday 4th September (0830-1730) (continued)

Behavioural ecology (Parallel session)

| Samaniego | Australia | PLEN | Rodent eradications on islands: bridging strategic vision and operational success |
|--------------------|--------------|------|---|
| Shani Masani | Australia | Oral | Black rats generalise across olfactory cues of different birds |
| Nikki Van de Weyer | Australia | Oral | Revealing burrow secrets: a short-term study of social organisation in free-living house mice |
| Xianfeng Yi | China | Oral | The maintenance mechanism of spatial memory in hibernating food-storing rodents: a case study of the Siberian chipmunk |
| Laura Grant | Australia | Oral | Behavioural drivers of responses of introduced rats to management devices: effect of rat origin and bait station construction material. |
| Catherine Price | Australia | Oral | Multimodal information use by foraging rodents – if, when, why? |
| Changlu Wang | USA | Oral | Using game cameras to monitor Norway rat foraging and nesting behaviour in apartment buildings |
| Pei-Jen Shaner | Taiwan | Oral | Ultrasonic vocalizations in adult Taiwan voles (Alexandromys kikuchii) |
| Georgia Muller | South Africa | Oral | Vocalisation library development for nine rodent species in Mpumalanga, South Africa |

Friday 5th September (0830-1630h), including closing remarks; Conference dinner (1730-2200h)

Ecology and Conservation

| | | | Conserving an endangered cultural icon, the water vole, in the face of American mink |
|---------------|----|------|--|
| Xavier Lambin | UK | PLEN | invasion of Britain: ecology, management and people |

| | | | Contrasting dynamics of small desert mammals and the implications for conservation |
|--------------------------------|--------------|------|--|
| Aaron Greenville | Australia | PLEN | and management |
| Zhibin Zhang | China | Oral | Broad-scale climate change drives population dynamics of rodents |
| Mmatsawela Ramahlo | South Africa | Oral | Minimally invasive data collection techniques for long-term monitoring of ecosystem health using free-ranging southern African rodents as biological indicators |
| Maria Oosthuizen | South Africa | Oral | Rodents in the Anthropocene: the importance of temporal niches |
| Nico Avenant | South Africa | Oral | Reimagining small mammal monitoring: a non-invasive approach using footprint identification technology |
| Justin Ladia | Philippines | Oral | Effects of habitat characteristics on the diversity and abundance of rodents in the forest ecosystem of Mt. Mingan, Dingalan, Aurora, Northern Sierra Madre, Philippines |
| Aris Reginaldo | Philippines | Oral | Small-mammal community structure in disturbed landscapes in upland Central Cordillera, Luzon Island, Philippines |
| Emerson Vieira | Brazil | Oral | Differential use of a keystone plant resource by small rodents in the sub-tropical Brazilian Atlantic Forest |
| Risnelli | Indonesia | Oral | Foraging behaviour of rice-field rats (<i>Rattus argentiventer</i>) in the presence of barn owls (<i>Tyto alba</i>) in Aceh, Indonesia |
| P-20: Desmarie Fernandez | Philippines | P+3' | Spatial ecology of endemic squirrels in Puerto Princesa Subterranean River National Park, Palawan Island, Philippines |
| P-21: Hima (Granjon) | France_Niger | P+3' | ObsMiCE, West African Observatory of small mammal indicators of environmental changes |
| P-22: Kong Yang | China | P+3' | Effect of bioturbation by plateau pika (<i>Ochotona curzoniae</i>) on soil carbon and nitrogen stocks in alpine meadows |
| P-23: Anamaria Lazar | Romania | P+3' | Structural and functional responses of small mammal communities to land abandonment in a region of high biodiversity |
| Grant Singleton / Lyn Hinds | Australia | | Awards and closing remarks. |
| Conference dinner | | | Gold Creek Station, Hall, ACT |