

Only presenting authors are given below.

Monday, 4 July 2022

starting at 17:00 **Registration**

At the **registration desk** (*SupAgro, Espace Philippe Lamour*), you will receive your conference badge, a printed program, your conference t-shirt, tickets for lunch & dinner, pins for mounting your poster(s), etc.

19:00-21:00 **Ice breaker party** (*Espace Philippe Lamour*)

Tuesday, 5 July 2022

All talks are in Room 1 (Amphithéâtre Philippe Lamour).

08:15-09:00	Opening and welcome address by WLS President, Chair of
	the LSG and WLC6 organizers
09:00-10:00	Plenary talk
	Comparative life history trajectories between lagomorphs and larger herbivores: a pace and shape analysis
	Jean-Michel Gaillard, UMR CNRS 5558 – LBBE "Biométrie et Biologie Évolutive", Université Claude Bernard Lyon 1, France
10:00-10:15	Coffee break
10:15-12:15	Open session 1 (short talks, 10+5 min each)
01	Recurrent evolution of winter coat colour polymorphism in mountain hares
	José Melo-Ferreira, CIBIO/InBio, University of Porto, Portugal
02	The evolution of seasonal camouflage in white-tailed jackrabbits in response to past and future climates
	Paulo C. Alves, CIBIO/InBio, University of Porto, Portugal



- **O3** What hares can tell us about fostering climate resilience for biodiversity L. Scott Mills, *University of Montana, USA*
- O4 Current status of the Irish hare (*L.t. hibernicus*): genomics, population size and disease Neil Reid, *Queen's University Belfast, UK*
- **O5** No need to cull predators for enhancing brown hare (*Lepus europaeus*) populations in farmland Darius Weber, *Independent wildlife consultant and researcher*
- O6 Influence of multiple predators decreases body condition and fecundity of European hares Martijn Weterings, *van Hall Larenstein Leeuwarden, The Netherlands*
- **O7** Rabbit and hare population status and management considerations in the eastern United States David Osborn, *University of Georgia, USA*
- O24 Tularemia, common vole outbreaks and Iberian hare population trends: correlative evidence for "disease pit" situation Carlos Rouco, *University of Cordoba, Spain*
- 12:15-13:45 Lunch break
- 13:45-14:45 **Plenary talk**

Hybridization and adaptive evolution in pikas Deyan Ge, *Institute of Zoology, Chinese Academy of Sciences, Beijing, China*

- 14:45-15:30 **Open session 2** (short talks, 10+5 min each)
 - **O8** Contrasted effects of alpine landscape on gene flow in two sympatric hare species Jérôme Letty, *Office Français de la Biodiversité (OFB), France*
 - **O9** Inference of positive selection in the evolution of major Lagomorph lineages Joao Pedro Marques, *CIBIO/InBio, University of Porto, Portugal*
 - **O10** Dublin Hareport: increased aircraft related mortality of a resident population of Irish hare (*Lepus timidus hibernicus*) at Ireland's largest civil airport

Samantha Ball, University College Cork, Ireland



15:50-16:40 **Open session 3** (short talks, 10+5 min each)

- **O11** Two species, one pheromone? Evidence that the European rabbit *Oryctolagus cuniculus* and the Mexican cottontail *Sylvilagus cunicularius* share the same nipple-search pheromone Robyn Hudson, *Universidad Nacional Autónoma de México, Mexico*
- **O12** Declining breeding success of the European hare in French farmland Guillaume Souchay, *Office Français de la Biodiversité (OFB), France*
- **O13** Gimme, gimme shelter: Determining key habitat features used by desert cottontails (*Sylvilagus audubonii*) for improved habitat restoration and conservation Samantha Bundick, *Colorado State University, Pueblo, USA*
- 16:40-17:00 WLC6 group photo

17:00-18:00 Workshop Euro Leporid
 Organizers: Jérôme Letty (OFB, France), Guillaume Souchay, (OFB, France), Klaus Hackländer (BOKU, Austria), Paulo C. Alves (University of Porto, Portugal)

18:00-19:00 Meeting IUCN Lagomorph Specialist group - LSG



Wednesday, 6 July 2022

Talks are either in Room 1 (Amphithéâtre Philippe Lamour) or in Room 2 (Amphithéâtre 206). The posters are in Rooms 106 & 108.

08:30-08:45	Announcements
08:45-09:45	 Plenary talk – Room 1 Chemosensory interaction and mother-young relationships in the European rabbit Gérard Coureaud, <i>Centre National de la Recherche Scientifique, UMR 5292 - Centre de Recherche en Neurosciences de Lyon, France</i>
09:45-10:15	Coffee break + Posters
10:15-12:15	Workshop – Room 1 (short talks, 10+5 min each)
	Lagomorph Taxonomy & Conservation
	Organizer: Paulo C. Alves (University of Porto, Portugal)
T1	Updating the global conservation status and threat assessments for world Lagomorphs
	Hayley C. Lanier, University of Oklahoma, USA
T2	Genetic diversity and population structure of the broom hare, Lepus castroviejoi
	José Costa, CIBIO/InBio, University of Porto, Portugal
Т3	Comparative landscape genomics of an imperiled native and invasive cottontail in the Northeastern US
	Thomas J. Mcgreevy, University of Rhode Island, USA
T4	Systematics of the Eastern cottontail rabbit group species (Lagomorpha: Leporidae: <i>Sylvilagus floridanus</i>) from Southwestern North America to South America
	Luis A. Ruedas, Portland State University, USA
Τ5	Introgressive hybridization promoted by climate change: a case study on hares (<i>Lepus</i> spp.)
	Juliana Alves, CIBIO/InBio, University of Porto, Portugal



T6 Phylogeography and ecological niche modeling unravel the evolutionary history of the Yarkand hare, *Lepus yarkandensis* (Mammalia: Leporidae), through the Quaternary

Brawin Kumar, Chinese Academy of Sciences, China & Indian Institute of Science Education and Research, India

T7 Splitting hares: Current and future ecological niches predicted as distinctly different for two congeneric lagomorphs
 Carlos P.E. Bedson, *Manchester Metropolitan University, UK*

10:15-12:15 **Workshop** – Room 2 (*short talks, 10+5 min each*)

Lagomorphs as a Model Morphological System 1

Organizers: Irina Ruf (Seckenberg Forschungsinstitut und Naturmuseum, Frankfurt, Germany), Brian Kraatz (Western University of Health Sciences, Pomona, CA, USA)

- M1 Computational biomechanical modelling of the rabbit and pika cranium during mastication Alana C. Sharp, *University of Liverpool, UK*
- M2 The relationships among cranial shape, locomotor habit, and visual field within leporids Brian Kraatz, *Western University of Health Sciences, USA*
- **M3** Evolutionary integration of the leporid cranium Emma Sherratt, *University of Adelaide, Australia*
- M4 Evolution of unique skull morphology and function in Lagomorphs: comparative phylogenetic, shape and complexity analyses Amber P. Wood-Bailey, *University of Liverpool, UK*
- M5 Mechanobiology and adaptive plasticity in the Lagomorph skull and feeding apparatus
 Matthew Ravosa, *University of Notre Dame, Indiana, USA*
- M6 Pulling the rabbit out of the hat: Revealing the development of lagomorphs in microCT scansRachel Racicot, *Vanderbilt University, USA*



13:30-15:45 **Workshop** – Room 1 (*short talks*, 10+5 min each)

Present, Past and Future of (un)known Lagoviruses affecting Lagomorphs 1

Organizers: Joana Abrantes (*CIBIO*, *Portugal*), Ana M. Lopes (*CIBIO*, *Portugal*), Pedro J. Esteves (*CIBIO*, *Portugal*), Esther Blanco (*INIA*, *Spain*), Carlos Rouco (*Universidad de Córdoba*, *Spain*), Lorenzo Capucci (*IZSLER*, *Italy*), Antonio Lavazza (*IZSLER*, *Italy*), Ghislaine Le Gall-Reculé (*ANSES*, *France*), Stéphane Bertagnoli (*INRA-ENTV*, *France*), Stéphane Marchandeau (*OFB*, *France*), Hacina Ain Baziz (*ENSV d'Alger*, *Algeria*), Faten Ben Chehida (*ENMV de Sidi Thabet*, *Tunisia*)

L1 Emerging European brown hare syndrome virus in *Lepus europaeus* in Spain

Josep Estruch Morente, Universitat Autònoma de Barcelona, Spain

L2 Retrospective study in French and Belgian European hare populations gives new insights into European brown hare syndrome virus and rabbit haemorrhagic disease virus 2 (*Lagovirus europaeus*/GII.1 and /GI.2) epidemiology

Ghislaine Le Gall-Reculé, ANSES, France

L3 Diagnostic efforts during an outbreak of rabbit haemorrhagic disease virus 2 (*Lagovirus europaeus* GI.2) in California, US (2020-2021)

Javier Asin, University of California, Davis, San Bernardino, USA

- L4 Multiple introductions of rabbit hemorrhagic disease virus Lagovirus europaeus/GI.2 in Africa
 Faten Ben Chehida, University of Manouba, Sidi Thabet, Tunisia
- L5 Protecting the endangered riparian brush rabbit from emergent RHDV2 in California, USA
 Deana Clifford, *California Department of Fish and Wildlife, USA*
 - Deana Chilolu, Caujornia Depariment of Fish and Wilauje, USA
- L6 Comparison of the impact of both variants of rabbit haemorrhagic disease on European wild rabbit populations based on Spanish national hunting bags

Juan Antonio Aguayo Adán, Universidad de Córdoba, Spain

 L7 Longitudinal semi-quantitative serological study of myxoma and rabbit haemorrhagic disease viruses in southwestern Iberian rabbit populations Nuno Santos, CIBIO/InBio, University of Porto, Portugal



13:30-14:25 **Workshop** – Room 2 (*short talks, 10+5 min each*)

Lagomorphs as a Model Morphological System 2

- M7 Cranial anatomy of *Palaeolagus haydeni* from the Oligocene of North America: systematic and evolutionary implications
 Irina Ruf, *Senckenberg Forschungsinstitut und Naturmuseum Frankfurt, Germany*
- **M8** The cursoriality gradient revisited: How running ability affects limb bone proportions and integration patterns in lagomorphs Ellen Martin, *University of Adelaide, Australia*
- M9 The timing of mountain hare (*Lepus timidus*) coat colour change in Norway is determined by elevation and latitude Allan Stokes, *Inland Norway University, Norway*
- 14:30-15:45
 Workshop Room 2 (short talks, 10+5 min each)

 Successes and Failures of European Rabbit Translocations

 Organizer: Jasja Dekker (Dierecologie, The Netherlands)
 - R1 Lessons from the 16th to 18th century and today for improving wild rabbit Oryctolagus cuniculus conservation
 Jasja Dekker, Jasja Dekker Dierecologie, Arnhem, The Netherlands
 - R2 How a single introduction of wild rabbits triggered the biological invasion of AustraliaJoel M. Alves, University of Oxford, UK
 - **R3** Not born to be wild: the European rabbit in North America Veronica Gventsadze, *Veterinarian in private clinical practice*
 - **R4** Wild European rabbit recovery plans: are we learning from the mistakes? Isabel Pacios-Palma, *Doñana Biological Station, Spain*
- 15:45-16:00 **Coffee break**

16:00-17:30 **Poster session** in Rooms 106 & 108

Election of best poster; the ballots are in your conference bag.



17:30-17:50	Short plenary talk – Room 1
	The biological basis for the cultural importance of hares
	Klaus Hackländer, Institute of Wildlife Biology and Game Management, Vienna University of Natural Resources and Life Sciences BOKU, Austria
17:50-18:40	General Assembly of the World Lagomorph Society (WLS)
	in Room 1
Start of buses at 19:00	Conference dinner
	Buses will start in front of the conference building.

Thursday, 7 July 2022

Talks are either in Room 1 (Amphithéâtre Philippe Lamour) or in Room 2 (Amphithéâtre 206).

08:30-08:45	Announcements
08:45-09:45	Plenary talk – Room 1
	Phylogenetic and taxonomic structure of modern pikas Ochotona
	Andrey A. Lissovsky, Severtsov Institute of Ecology and Evolution RAS, Moscow, Russia
09:45-10:15	Coffee break
10:15-11:15	Open session 4 – Room 1 (short talks, 10+5 min each)
014	Using genomic patterns of introgression to reconstruct the history of divergence between the sister broom and Corsican hares (<i>Lepus</i> spp.)
	João Souto, CIBIO/InBio, University of Porto, Portugal
015	Gastrointestinal parasite infestation in the Alpine mountain hare (Lepus

O15 Gastrointestinal parasite infestation in the Alpine mountain hare (*Lepus timidus varronis*): are abiotic environmental factors such as elevation, temperature and precipitation affecting prevalence of parasite species? Stéphanie Schai-Braun, *University of Natural Resources and Life Sciences (BOKU), Austria*



- **O16** Sex biases the flea (Siphonaptera) infection on wild Mexican cottontails (*Sylvilagus cunicularius*): report from a longitudinal study Fernando Aguilar-Montiel, *Universidad Autónoma de Tlaxcala, Mexico*
- **O17** Hare today gone tomorrow: the role of interspecific competition in shaping riverine rabbit occupancy and density Zoe Woodgate, *University of Cape Town, South Africa*

11:15-12:15 **Short talks** – Room 1

Ecology, Behavior & Conservation 1 (10+5 min each talk)

- E1 Reproductive isolation between European rabbit subspecies informed by genome wide hybrid incompatibilities
 Soraia Barbosa, *CIBIO*, *Portugal*
- **E2** Decrease of European hare (*Lepus europaeus*) densities in a context of grassland-dominated areas: feasibility study of reinforcement operations involving captive-bred animals first analyses Léopold Berger, *Faune INNOV' R&D, Besançon, France*
- **E3** Using faecal pellets to monitor the changes in mountain hare *Lepus timidus* and the European hare *Lepus europaeus* wintering distribution in the French Alps

Thibaut Couturier, University Paul-Valéry Montpellier, EPHE, France

E4 Stable individual differences in the frequency of chin-marking behavior across development in the domestic rabbit (*Oryctolagus cuniculus*): What does it mean?

Yesenia Fernández, Universidad Autónoma de Tlaxcala, Mexico

11:15-12:15 **Workshop** – Room 2

Present, Past and Future of (un)known Lagoviruses affecting Lagomorphs 2 (*short talks, 10+5 min each*)

- L8 The role of recombination in the emergence and evolution of rabbit hemorrhagic disease virus (RHDV)
 Joana Abrantes, *CIBIO*, *Universidade do Porto*, *Vairão*, *Portugal*
- L9 Recombination between viral genomes as a potential mechanism for speciation: the example of rabbit haemorrhagic disease type 2 (RHDV2)
 BG12

Patrizia Cavadini, IZSLER, Brescia, Italy



L10 Detection and differentiation of RHDV genotypes GI.1 and GI.2 by a duplex lateral flow assay Esther Blanco, *Centro de Investigación en Sanidad Animal,Madrid, Spain*

12:15-13:45 **Lunch break**

13:45-15:15 **Short talks** – Room 1

Ecology, Behavior & Conservation 2 (10+5 min each talk)

- E5 Warming climate favours the spatial overlap between mountain and European hares at the top of the Alps
 Valentina La Morgia, *Istituto Superiore per la Protezione e la Ricerca Ambientale, Italy*
- **E6** The Faroes mountain hare (*Lepus timidus*) and hunting of hare in the Faroe Islands during the years 2012-2021 Eyðfinn Magnussen, *University of the Faroe Islands, Faroe Islands*
- E7 Experimental study on the reproductive seasonality of *Oryctolagus* cuniculus subspecies
 Patricia H. Vaquerizas, *IESA-CSIC, Spain*
- **E8** On the ecology of the Italian hare (*Lepus corsicanus*) Maria Buglione, *University of Naples Federico II, Italy*
- **E9** Reproductive cost in female European and mountain hare Maria Ferloni, *Università degli Studi di Torino, Italy*
- **E10** Long-term patterns of brown hare (*Lepus europaeus*) population dynamics in Vojvodina (Serbia) in relation to agriculture, climate and predation

Igor Ponjiger, University of Novi Sad, Serbia

13:45-15:15 Workshop – Room 2 Present, past and future of (un)known lagoviruses affecting lagomorphs 3 (short talks, 10+5 min each) L12 Understanding U.S. rabbit owners' willingness to engage in biosecurity measures to prevent transmission of PHDV2

- Hannah Shapiro, University of Georgia, USA
- L13 National rabbit biocontrol optimisation assessing the potential of RHDV2 as a registered biocide Tanja Strive, *CSIRO Health & Biosecurity, Acton, ACT 2601 Australia*



- L14 Leporid herpesvirus-4: potential new additional biocontrol for pest *Oryctolagus cuniculus* David Peacock, *University of Adelaide*, *Australia*
- 15:15-15:45 Coffee break
- 15:45-17:15 **Open session 5** Room 1 (*short talks, 10+5 min each*)
 - **O18** Saving the striped rabbits: A conservation action plan for the Annamite and Sumatran striped rabbits Jennifer McCarthy, *Lincoln University*, USA
 - **O19** Drawing the baselines for the good management of a Mediterranean key species, the wild rabbit Javier Fernández-López, *Universidad Complutense de Madrid, Spain*
 - **O20** Serosurveillance of the myxoma virus in Iberian hares (*Lepus granatensis*) after the first outbreak Beatriz Cardoso, *Universidade do Porto, Portugal*
 - O21 Absence of hepatitis E virus circulation in hares collected in Italy from 2019 to 2021

Antonio Lavazza, IZSLER, Brescia, Italy

- **O22** Multidisciplinary approaches to recovering an imperiled cottontail in the presence of competing threats in a heavily impacted system Amanda Cheeseman, *South Dakota State University & SUNY College of Environmental Science and Forestry, USA*
- **O23** Abundance and habitat use of the insular endemic black jackrabbit (*Lepus insularis*) in Espíritu Santo Island, Gulf of California, Mexico María José Moran Gutiérrez, *Centro de Investigaciones Biologicas del Noroeste, S.C., Mexico*
- 17:15-17:45 Closing session / Poster prizes
- around 18:00 Wine tasting



Friday, 8 July 2022

08:00-19:00 **Excursions**

Details will be announced.