

## Laboratory of Mammalian Ecology, 2018–2022

Scientific staff	i10	H index	RG Score	Number of papers	Dissemination of results
1 leading researcher	97	14	2870		
3 senior researchers	77	15	1910		
	47	9	814.5		
2 researchers	21	9	650.3		
	-	6	105.8		
	-	2	33.1		
1 biologist/PhD student	-	5	118.1		

### PhD studies – defended thesis

2022 N. Kitrytė	Diversity of small mammal parasites and factors shaping their communities
	Evaluation of wildlife–vehicle collision patterns and assessment of mitigation measures
2021 A. Kučas	Impact of the colonies of great cormorants ( <i>Phalacrocorax carbo sinensis</i> ) on mammals
2020 M. Jasiulionis	
2018 P. Alejūnas, 2021 R. Varanauskas, 2022 J. Barščevska & L. Labanauskaitė – no defence	<i>Conclusion: we have very high requirements for PhD students</i>

### Projects & grants

#### Leading

2022–2025	Survey of attitudes towards large carnivores in Baltic countries (country leader)
2018–2019	Assessment of common vole ( <i>Microtus arvalis</i> ) in commercial orchards and berry fields ...
2017–2020	Structure of small mammal parasite communities and intestinal microbiota and their regulation
2016–2024	European Mammal Atlas 2 (country leader)

#### Participating

2019–2023	Investigations of the Status of Invasive and Alien Species in Lithuania
2022–2025	Natural anti- $\alpha$ -Gal antibodies and the protection against avian malaria

#### Not funded

2018	Development and application of mass spectrometry methods for the investigation of the formation of micromammal communities in disturbed ecosystems (LMT)
2019	Investigation of the formation of micromammal communities in commensal habitats using mass spectrometry methods (LMT)
2020	Investigation of the formation of micromammal communities in commensal habitats using mass spectrometry methods (LMT)
2020	Resource partitioning of three sympatrically breeding colonial waterbirds (LMT Daina)
2021	Resource partitioning of three sympatrically breeding colonial waterbirds (LMT Daina2)
2022	Microbiology: a novel approach for metapopulation conservation and ecological network management (Biodiversa+)
2022	Population resilience of a wetland species vs. the geological history and connectivity of hydrogenic habitats: the root vole <i>Microtus (Alexandromys) oeconomus</i> as a bioindicator of habitat stability – Implications for species conservation (Biodiversa+)

### Scientific and practical cooperation

Friedrich-Loeffler-Institut, Germany on pathogen research; Imperial College London, University of Oxford, Quadram Institute Biosciences, UK; University of Alberta, Canada; University of Queensland, Australia on microbiota research; Latvian State Forest Research Institute “Silava”, Estonian University of Life Sciences; New Hampshire University, USA on large carnivore monitoring; FTMC on stable isotope analysis; VDU and GTC in genetic and parasitology; University of Southern Denmark, Denmark, Manchester Metropolitan University, UK on data analysis; University of Milano, Italy on preparation of grant proposal; Büro für ökologische Studien, Naturschutzstrategien und Landschaftsplanung, Germany on hazel dormouse monitoring, joint publications; Senckenberg Research Institute and Natural History

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Museum Frankfurt, Germany, University of Liege, Belgium on dormouse genetic analysis, joint publications; Palacký University, Olomouc, Czech Republic, University of Turin, Italy – cooperation for joint publications; Kindai University, Japan; University of Sibiu, Romania; University of Zielona Góra, Poland; University of Prešov, Slovakia; Institute of Zoology, Moldova; Düzce University, Turkey; Sofia University, Bulgaria, etc. – cooperation for publications.

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### Scientific topics

1. Mammal fauna, threatened and invasive species (distribution, numbers and trends)
2. Road ecology (habitat-based modelling, collision pattern recognition using neural AI networks)
3. Investigations into mammal diversity and trophic ecology in commensal and agricultural habitats
4. Pathogens of small and carnivorous mammals
5. Long-term investigations into mammals – focus on climate change, space/time gradients and sustainable use
6. Socio-ecological research involving the community in conservation planning and decision-making.

### The most promising research

1. Analysis of the long-term trends in mammal fauna with respect to climate and landscape change.
  2. Cooperative pathogen research in mammals (new species to science and the country).
  3. Fundamental research in trophic ecology based on stable isotopes.
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### Social impact

1. Pathogen investigations (especially in agricultural and commensal habitats) contribute to public health.
  2. Road ecology investigations contribute to road safety.
  3. Obtained results important to the management of wildlife, conservation, and eradication of invasive species.
  4. Stakeholders (hunters, foresters, farmers, beekeepers) and representatives of society were involved.
  5. Results involving citizen science were reported to participatory groups, including schools.
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**Representation** International: ERGA (European Reference Genome Atlas), IUCN Otter specialist group, IUCN Bison specialist group, IUCN Bear specialist group, EMMA2 (European Mammal Atlas), ERL (European Red List project).  
National: Advisory Council on Hunting Management; Invasive Species Control Council, Red Data Book Commission, Working Group on Wildlife Welfare and Captivity, Zoo Inspection Commission.

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**Involvement in publishing** Journals: *Forest Ecosystems*, *Acta Biologica Universitatis Daugavpiliensis*, *North-western Journal of Zoology*, *Theriologia Ukrainica*, *Land, Sustainability, Diversity, Life*,; *Forests, Zoology and Ecology* as Editor in chief, Editorial board, Reviewer board, Guest editor.

Reviewing: about 150 reviews for *Agronomy*, *Animals*, *Ambio*, *Applied Sciences*, *Behavioural Processes*, *Biologia*, *Biology and Life Sciences Forum*, *Biodiversity and Conservation*, *Birds*, *Chemosphere*, *Conservation*, *Diversity*, *Drones*, *Ecology and Evolution*, *Ecologies*, *Environmental Toxicology and Chemistry*, *Fire*, *Forest Ecology and Management*, *Forest Ecosystems*, *Forests*, *Genes*, *Global Ecology and Conservation*; *Integrative Zoology*, *IJGI*, *IJERPH*, *Journal of Environmental Management*, *Journal of Vertebrate Biology*, *Journal of Zoology*, *Land, Life, Mammal Research*, *Mammal Study*, *Mammalia*, *Natureza*, *Oceans*, *Remote Sensing*, *Silva Balcanica Sustainability*, *Transport D*, *Zoological Science*, *Zoology and Ecology*, *Water*, *Wildlife Biology*, etc.

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**Strengths** Nationwide data on small mammals (1975-2022), roadkill (2002-2022), and dormice (1985-2022). Strong record of field investigations in combination with camera-trap ones and analyses. Methods from related sciences (isotopic, parasitological studies, GIS, neural networks, sociology). Diverse issues in mammal research, publishing in top-tier journals.

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**Opportunities** We represent Lithuania in a broad range of international organizations dealing with mammals.

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**Weaknesses** No equipment and financial capacity for advanced research with sophisticated instrumentation, so we are dependent on collaboration. Insufficient participation in international projects.

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**Threats** Science politics in the country tend to ignore classic science disciplines, e.g., zoology. The team is very small and not all PhD students stay after the defense. Changes in legislation, limiting fieldwork with live organisms (e.g., snap-trapping).

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