

# **Investigation of traditional ecological knowledge of wild animal species in the Carpathian Basin**

Summary of Ph.D. Thesis

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## INTRODUCTION

Traditional knowledge systems about the landscape and the biota have been fundamental for human development since the times of pre-modern and pre-industrial societies in Europe. Humans living in close contact with the landscape as herdsman and peasants have long possessed unified, systematic knowledge, including folk taxonomies, about phenomena that were of importance to them. The use and management of natural resources was based on centuries-old, often millennia-old ecological experience, on multi-generational knowledge passed down from generation to generation. According to Fikret Berkes, traditional ecological knowledge is a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment. In our work, we also focused on the study of traditional ecological knowledge within the meaning of Berkes' definition.

Ethnozoology is the scientific study of the dynamic relationships among people, and animals. Traditional ethnozoological knowledge has great cultural and economical importance. It is widely studied in the tropics and North America, but much less in Europe. Wild animal-based natural resources are often among the key resources local communities depend on. A major goal of these communities is to use and manage these resources sustainably. Long-term sustainability in the use and management of natural resources requires healthy ecosystems, while at the same time, sustainable management often contributes to maintaining the health of ecosystems.

The knowledge passed by local traditional communities, however, not only serves sustainable use and maintenance of the local community and its environment but may also provide valuable data, information and knowledge to science and conservation. Among the potential benefits of traditional ecological knowledge, it can help science to recognize new species, provide data on population sizes and dynamics of species that are difficult to observe, support the

monitoring of ecosystem health, incl. pasture conditions, and develop efficient conservation management strategies and practices.

Research on ecological knowledge of people living in rural areas is receiving increased attention worldwide, and research on this field has also become more significant in Hungary in the last 10 years. Traditionally, ethnozoologists were primarily interested in basic research on the folk taxonomy of vertebrate species and more direct examination of some highly salient taxa which have direct relevance to people. In this thesis, in addition to the examination of these two topics, a more focused study of invertebrate-related knowledge and ecological/conservation issues were targeted.

## **OBJECTIVES**

Our research has the objective of presenting the folk knowledge of wild animals in Hungarian communities; examine the possibilities of knowledge coproduction between indigenous and local knowledge holders and the science; and study the local knowledge and perception of the European beaver's impact on local ecosystem services. The objectives in detail were:

- 1) make a list of folk taxa of invertebrates and wild mammal species,
- 2) describe folk biological classifications and nomenclatures of invertebrates and wild mammal species,
- 3) collect the salient features of invertebrates and wild mammal species,
- 4) collect the uses, related proverbs and sayings, and their conservation of invertebrates and wild mammal species,
- 5) examine the expert judgment of academic zoologists (with little or no expertise in traditional knowledge) and a feature-based linear model at predicting the observed level of local familiarity with wild animal species,
- 6) define the most useful morphological, ethological, ecological and cultural features for predicting the level of local familiarity with wild animal species,

7) describe the local knowledge about the Eurasian Beaver (e.g. protection status, reintroduction history, local distribution, feeding habits),

8) examine the local perception of negative or positive impacts of beavers on local provisioning, regulating and cultural ecosystem services, on nature and local livelihoods in general,

9) examine the local perceptions on the harmfulness and usefulness of beavers and its impacts on nature and the lives of locals.

## **MATERIAL AND METHODS**

### **Study areas**

We collected data among ethnic Hungarians practicing small-scale traditional agriculture in different landscapes: in the first research on mammals in north-western Romania; in the second on invertebrates in Romania (Sălaj), Slovakia (Gemer) and Croatia (Baranja). In these first two researches the choice of these regions were justified by the still existing traditional life-style, a varied natural environment, and the population size of inhabitants, which could ensure a larger number of knowledgeable informants.

The local knowledge obtained for the analysis examining predictions by zoologist and a feature-based linear model originated from the same three Romanian Slovakian and Croatian regions.

For the investigation of local people's perceptions on the Eurasian beaver three regions were chosen where beavers are present in waters close to settlements and where their activity affects the floodplains considerably. The study areas are in different types of watersheds (streams, small rivers and river branches of large rivers) and the local communities are in different socio-economic situations (traditionally farming and partially modernized). Studies were carried out in Romania (the Kászon Basin) and in Hungary (Szigetköz and in the Mura River valley).

## **Data collection and analysis**

Related to interviews about mammals and invertebrates, the objective was to identify and interview local people with the most extensive knowledge, that is why mainly snowball-method was employed to find the most knowledgeable people. We studied invertebrate and mammal species (species groups) potentially occurring in the vicinity of the settlements. We used photos, held semi-structured interviews, and conducted picture sorting, during which they were asked to group species according to their own systems. We used these results to reconstruct the folk taxonomy. The indoor interviews were recorded on a dictaphone (approximately 88 hours of recording).

For the data collection for local people's perception of the Eurasian Beaver's impact on ecosystem services, structured interviews were conducted with 30 local people for three study sites. Half of the informants (altogether 45 people) were recommended by residents and local community leaders as 'inhabitants knowledgeable about beavers' (knowledgeable local interviewees – KLIs). The other half of the informants helped in representing the average population's knowledge and were chosen randomly, without any special recommendation.

Twelve scientific and conservation experts from Hungary and 6 from Romania were also interviewed in the same time period, using the same interview sheet, to improve our understanding about the local situations.

The impact of beavers on ecosystem services was analysed by extracting all information from the transcribed texts about each service mentioned by the informants. The beavers' negative and positive impacts on provisioning ecosystem services were analysed based on the number of respondents who mentioned certain categories. For regulating and cultural ecosystem services, the total number of informants mentioning them, and the mentioned memes (information units) were counted.

Overall perception of beavers' usefulness and harmfulness was elicited using multiple-choice questions and also free listing ones and a 3-grade scale. Both the overall perception of beavers' usefulness and harmfulness and the informants'

personal involvement were analysed by the number of respondents and the number of mentioned memes.

In the fourth study (in which we examined predictions by zoologist and a feature-based linear model on local knowledge) we determined the level of observed familiarity among local peoples. We counted the proportion of local knowledgeable informants who know the species at least moderately, i.e. can list at least 3 independent memes related to the species.

A linear model was constructed to quantify how particular features (morphological, ethological, etc.; i.e. explanatory variables) contribute to the level of observed familiarity (i.e. the dependent variable). Explanatory variables of the model were represented by 10 relevant features (traits and others). Each feature had 6 categories (from “no importance” to “great importance” for humans). Each category of each feature was included as a factor in further analyses. Parametrization was based on published literature data. Only elements of traditional knowledge that are part of an average biologist’s or zoologist’s knowledge (who are not experts in traditional knowledge) were taken into account during parametrization.

For variable selection (i.e. for separating the significant and the redundant variables), a forward stepwise procedure was used, based on the corrected Akaike’s Information Criterion. Coefficients of the final linear model were calculated via model averaging. All the candidate models with significant explanatory power were included in the model averaging. The differences between the levels of estimated and observed familiarity were calculated for the 81 species selected for the zoologist prediction.

81 of the 166 taxa were selected by random stratified sampling for a questionnaire, ensuring that all the main taxonomic groups (mammals, reptiles, amphibians, molluscs, insects, and “other invertebrates”) were represented. Three roughly equal groups contained species that were locally well known, moderately known and almost unknown.

We asked 20 zoologists from Hungary and Romania who are familiar with the studied areas (researchers working at universities, museums and research institutes,

zoology teachers, governmental and civil conservationists) to complete the questionnaire. Specialists in single species or small taxonomic groups (according to publication lists) were excluded. Of the 42 zoologists who qualified, 20 selected at random were asked to classify each species into four categories based on the level of familiarity they would expect from locals. For each species the average value of the 20 answers was calculated.

Spearman's rank correlation was applied in order to test the statistical dependence between a) the ranking of specific explanatory variables and the level of familiarity expected by zoologists and b) the ranking of specific explanatory variables and over- or underestimation of familiarity by zoologists.

Species were ranked according to the observed levels of familiarity based on traditional knowledge holders, and by the level of familiarity predicted by the zoologists. The differences between the two ranks were calculated.

## **RESULTS**

### **The key findings of the dissertation**

With the documentation of folk knowledge on wild mammals and invertebrates we provide a list of folk taxa, and discuss folk biological classification and nomenclature, salient features, uses, related proverbs, sayings, and conservation.

The most important findings:

- 208 invertebrate and 42 mammal folk species were identified
- 859 invertebrate and 122 mammal folk name – folk (and scientific) taxon identifications were made
- first description of the folk taxonomy of invertebrates and mammals in Hungarian (Central European) communities
- salient features of invertebrates and mammals were described for all known folk species
- 30 different uses of invertebrates were documented

We studied local knowledge of beavers and the perception of their impact on ecosystem services and local livelihoods, and the perception of their general harmfulness and usefulness in Hungary and Romania in three ecologically distinct, diverse rural landscapes. The most important findings:

- locals had a deep knowledge on beavers' behavior and impact
- the negatively most affected people were more constructive related to the conservation of beavers
- much more people had negative attitude towards beavers than those who were personally affected

We examined whether the expert judgment of academic zoologists or a feature-based linear model is better at predicting the observed level of local familiarity with wild animal species. The most important findings:

- similar accuracy of zoologists' and a feature-based linear model's estimates on local ethnozoological knowledge (ca. only 60%, and 70 %) was identified
- 50% overlap was identified between the species most inaccurately estimated by the zoologists and a feature-based linear model
- neither the overestimated nor the underestimated group of species was significantly different in their traits (tendencies - zoologists' accuracy decreased by undervaluation of local folklore and local usefulness and overvaluation of the importance of striking morphology; the model overemphasized morphology, size and abundance)

## **CONCLUSIONS**

Biologists may ask why one should study folk knowledge of animals in a region so often studied by zoologists for centuries. There are several answers to this question. The main goal of science is to describe the world. We argue, that before the dual impact of the market economy and public education became so powerful, Hungarian rural people might have possessed knowledge as deep as that of, for



example, the natives of Amazonia. Ethnographic works from the late 19<sup>th</sup> and early 20<sup>th</sup> centuries provide the basis for this argument. In spite of this documentation of folk zoological knowledge in Europe is very limited. Although the names of the most important wild animals have been collected by ethnographers and linguists, folk zoological knowledge was not documented and published sufficiently due to the limits of theoretical and personal zoological knowledge and, also, due to the varying range of scientific interests.

Locals and conservationists often use different indicators to assess certain ecosystem services and they also view impacts on the local ecosystem services from different perspectives. Their understanding of biodiversity is also different. Communication with knowledgeable locals who are – as our results show – generally more receptive to regulating services could lead to satisfactory compromises and understanding in management. Local traditional ecological knowledge of wild animals is highly relevant to helping us understand the mentality and worldview of local people.

High level of uncertainty among zoologists in estimating local familiarity (30-40%) shows, that it may be unrealistic to expect academic zoologists with limited understanding of traditional zoological knowledge to identify adequate target species for knowledge co-production and thus bridge knowledge systems. It also raises ethical issues, for example, how correct it is to push scientists preparing assessments (e.g. in CBD or IPBES) to do reviews in areas they are not familiar with. It induces unfavorable bias in recognition given to different perspectives, and also imply the negative practice relying solely on external perspectives. This way both the local and external experts are treated unfairly which hinders the possibilities of the effective knowledge co-production.

Cooperative research based on more than one knowledge system can unite the benefits of different ontological and epistemological systems. Cooperative research can eliminate knowledge gaps, which can benefit all stakeholders who are actively involved in the process. We argue that bias and underestimation of local knowledge can hinder these processes, can lead to less efficient cooperation and

even waste resources, for example, if communication of conservationists is not adjusted well to the knowledge locals have of target species and species groups.

It is our sincere hope that traditional knowledge holders and their knowledge can thus more effectively promote the protection of species and habitats and the sustainable use of biodiversity, and increase awareness of the need for conservation. Inclusive conservation approaches can take into account not only the knowledge of locals but also local economic and socio-cultural aspects (e.g. perceptions based on local values and beliefs). Better recognition of local knowledge could also help the preservation and transmission of local knowledge necessary for the continuation of local – often still sustainable – land-use practices.

We argue that researchers of traditional and local knowledge can function as bridging experts in these activities, aiding zoologists and conservationists who seek target species for knowledge co-production. It is the scholars' responsibility to learn, archive and use the knowledge connected to animals, meanwhile, zoologists would have the opportunity to decolonize their approaches, open up to traditional knowledge, and learn how to work in collaboration with local people. We believe that a more efficient bridging of knowledge systems could increase the chances of success and lead to improved cooperation between conservation practice, academic science, and indigenous and traditional knowledge holders.

# LIST OF PUBLICATIONS

(MTMT identification number: 10048295)

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## Publications related to thesis

### Full papers (IF: 9.446)

Ulicsni Viktor, Babai Dániel, Juhász Erika, Molnár Zsolt, Biró Marianna 2020. Local knowledge about a newly reintroduced, rapidly spreading species (Eurasian beaver) and perception of its impact on ecosystem services. PLoS ONE, 15(5), e0233506. IF: 2,740

Ulicsni Viktor, Babai Dániel, Vadász Csaba, Vadász-Besnyői Vera, Báldi András, Molnár Zsolt 2018. Bridging conservation science and traditional knowledge of wild animals: The need for expert guidance and inclusion of local knowledge holders. Ambio, 1-10. IF: 4,103

Ulicsni Viktor, Svanberg Ingvar, Molnár Zsolt 2016. Folk knowledge of invertebrates in Central Europe-folk taxonomy, nomenclature, medicinal and other uses, folklore, and nature conservation. Journal of Ethnobiology and Ethnomedicine, 12(1), 47. IF: 1,903

Ulicsni Viktor, Svanberg Ingvar, Molnár Zsolt 2013. Folk knowledge of non-domestic mammals among ethnic Hungarians in North-Western Romania. North-Western Journal of Zoology 9(2), 383-398. IF: 0,7

### Oral/poster presentations

Juhász E., Molnár Zs., Ulicsni V., Babai D., Biró M. Effects of an ecosystem engineer in the Carpathian Basin – Opinions of conservationists and local people about the Eurasian beaver. Landscape diversity and biodiversity – 18th International Symposium on Problems of Landscape Ecological Research, Smolenice, Slovakia, 23-27. April, 2019. (poster)

Ulicsni V., Babai D., Vadász Cs., Báldi A., Molnár Zs. Traditional ecological knowledge of wild animals: an underestimated opportunity for knowledge co-production for biodiversity assessments and conservation. 40th Annual Meeting of the Society of Ethnobiology, Montréal, Canada. 10-13. May, 2017. (oral presentation)

Babai D., Ulicsni V., Molnár Zs., Biró M. „Csudálta mindenki, mentek ki a hódvárat megnézni...” Helyi percepciók és konfliktusok egy újonnan betelepült faj kapcsán. X. Magyar Természetvédelmi Biológiai Konferencia: Műhelytalálkozó „Zászlóshajók, karizmák és esernyők: mit tehet az emlőskutatás a természetvédelemért Mórahalom, Hungary. 1-3. April, 2016. (oral presentation)

Ulicsni V. A gerinctelenekhez kapcsolódó hagyományos tudás és népi taxonómia a Kárpát-medencében. IX. Magyar Természetvédelmi Biológiai Konferencia: "Tudományoktól a döntéshozatalig" – Szeged, Hungary. 20-23. November, 2014. (poster)

Ulicsni V. Folk taxonomy, salient features, traditional usage and beliefs of invertebrate species in Central Europe. 14th Congress of the International Society of Ethnobiology Bhumtang, Bhutan. 1-7. June, 2014. (oral presentation)

Ulicsni V. Folk knowledge of invertebrate species in Central Europe. 36th Annual Meeting of the Society of Ethnobiology Denton, Texas. 14-23. May, 2013. (poster)

## Publications not related to thesis

### Full papers

Biró Marianna, Molnár Zsolt, Öllerer Kinga, Lengyel Attila, Ulicsni Viktor, Szabados Klára, Kiš Alen, Perić Ranko, Demeter László, Babai Dániel 2020. Conservation and herding co-benefit from traditional extensive wetland grazing. Agriculture, Ecosystems & Environment, 300, 106983. IF (2019): 4,241

Varga Anna, Demeter László, Ulicsni Viktor, Öllerer Kinga, Biró Marianna, Babai Dániel, Molnár Zsolt 2020. Prohibited, but still present: Local and traditional knowledge about the practice and impact of forest grazing by domestic livestock in Hungary. Journal of Ethnobiology and Ethnomedicine, 16(1), 1-12. IF (2019): 2,264

Ulicsni Viktor, Babai Dániel Folk knowledge of wild animals in the Slovenian-Hungarian borderland. Acta Ethnographica Hungarica. (in press)

Babai Dániel, Szépligetű Mátűs, Tóth Antónia, Ulicsni Viktor Traditional ethnobotanical knowledge and the cultural significance of plants in Hungarian communities of Slovenia. Acta Ethnographica Hungarica. (in press)

Ulicsni Viktor, Molnár Zsolt 2019. Vadon élű állatokhoz kapcsolódó hagyományos tudás a Hortobágyon [Contribution to herders' folk knowledge of wild animals in the Hortobágy region] in Tóth Albert, Tóth Csaba (2019, eds.) A Hortobágyi Természetvédelmi Kutatótábor 45 éve. Alföldkutatásért Alapítvány, Kisújszállás.

Juhász Erika Mária, Biró Marianna, Ulicsni Viktor, Molnár Zsolt 2019. Természetvédők és kutatók ismeretei az eurázsiai hód kapcsán a Kárpát-medencében I.: elterjedés, életnyomok, az együttélés lehetőségei, az elhullás okai. Természetvédelmi Közlemények, 25, 59-79.

Ispán Ágota Lídia, Babai Dániel, Mód László, Ulicsni Viktor, Mészáros Csaba 2018. Complex Ethnographic Research Methods for the Study of Protected Areas and Border Communities at the Slovenian-Hungarian Border1. Acta Ethnographica Hungarica, 63(2), 471-500.

Babai Dániel, Ulicsni Viktor, Avar Ákos 2017. Conflicts of Economic and Cultural Origin Between Farmers and Wild Animal Species in the Carpathian Basin - an Ethnozoological Approach. Acta Ethnographica Hungarica. 62(1), 187-206.

Juhász Erika, Babai Dániel, Biró Marianna, Molnár Zsolt, Ulicsni Viktor 2017. Az eurázsiai hód (*Castor fiber*) táplálkozású és fásszárú-használatú szokásaival kapcsolatos helyi tudás két évtizeddel a visszatelepítések kezdete után a Kárpát-medencében [Local ecological knowledge on feeding habits and woody plant species usage of the reintroduced Eurasian beaver (*Castor fiber*) in the Carpathian Basin two decades after its reintroduction]. Természetvédelmi Közlemények. 23, 182-200.

Babai Dániel, Avar Ákos, Ulicsni Viktor 2016. „Veszélyes a varas béka, rossz fajzat!” – Az etnozoológia jelentősége és feladata a 21. Században [“The warty frog is dangerous, maleficent kind” The significance and importance of ethnozoology in the 21<sup>st</sup> century]. Kovász. 1, 3-29.

Varga Anna, Molnár Zsolt, Biró Marianna, Demeter László, Gellény Krisztina, Miókovics Eszter, Molnár Ábel, Molnár Krisztina, Ujházi Noémi, Ulicsni Viktor, Babai Dániel 2016. Changing year-round habitat use of extensively grazing cattle, sheep and pigs in East-Central Europe between 1940 and 2014: Consequences for conservation and policy. Agriculture, Ecosystems & Environment. 234, 142-153. IF: 4,099

### Oral/poster presentations

Ulicsni V., Molnár Zs., Babai D. Different preferences of conservationists and local farmers regarding protected species with conservational significance in a high nature value borderland region. 10th Biennial conference of the European Society for Environmental History, Boundaries in/of Environmental History. Tallinn, Estonia, 21-25. August, 2019. (oral presentation)

- Juhász E., Biró M., Ulicsni V., Babai D., Molnár Zs. Magyarországi természetvédők és kutatók ismeretei az eurázsiai hóddal kapcsolatban. Hódkonferencia, Budapest, Hungary, 9. December, 2019. (oral presentation)
- Biró M., Molnár Zs., Babai D., Ulicsni V., Varga A., Dénes A., Fehér A., Barta S., Sáfíán L., Szabados K., Kiš A., Demeter L., Bölöni J., Öllerer K. Use of historical written, oral and map sources to understand vegetation patterns and dynamics of landscapes. Mongolian Academy of Sciences. Ulanbataar, Mongolia. 18. July, 2019. (oral presentation)
- Ulicsni V., Molnár Zs., Babai D. Different preferences of conservationists and farmers in relation to animal species with conservational significance in protected areas. International Society of Ethnobiology, Belém do Pará, Brasil, 7-10. August, 2018. (oral presentation)
- Ulicsni V., Avar Á., Batdelger G., Babai D., Molnár Z. Folk taxonomy, traditional usage and beliefs of invertebrate species in Möörön, Mongolia. XVI Congress of the International Society of Ethnobiology, Belém do Pará, Brasil, 7-10. August, 2018. (poster).
- Juhász E., Biró M., Ulicsni V., Babai D., Molnár Zs. Az eurázsiai hód magyarországi elterjedésének folyamata és az együttélés lehetőségei a természetvédők szemszögéből. XXXI. Vándorgyűlés, Budapest, Hungary. 22-23. November, 2018. (oral presentation)
- Diós K., Ulicsni V., Molnár Z. The background of human-wildlife conflicts in connection with the golden jackal (*Canis aureus*). 2nd International Symposium on jackals and related species, Marathon Bay – Attica, Greece. 31. October-2. November, 2018. (poster)
- Juhász E., Molnár Zs., Babai D., Ulicsni V., Biró M. Természetvédelmi szakmai tudás az eurázsiai hód (*Castor fiber*) kapcsán a Kárpát-medencében. 19. Kolozsvári Biológus Napok, Cluj-Napoca, Romania. 13-14. April, 2018. (oral presentation)
- Molnár Zs., Demeter L., Kiš A., Szabados K., Marinkov J., Babai D., Ulicsni V., Biró M. Traditional pig grazing in the Bosut forest (Serbia) - ethnoecological and conservational perspectives. 7BBC, Novi Sad, Serbia. 10-14. September, 2018. (oral presentation)
- Demeter L., Kiš A., Biró M., Babai D., Szabados K., Marinkov J., Juhász E., Ulicsni V., Kemenes A., Molnár Zs. Traditional pig herding in the floodplain of the Sava river - an ecological perspective of forest and wetland grazing in Bosut Forest, Serbia. Botanica Serbica 42 (Suppl.): 118. (poster)
- Juhász E., Babai D., Ulicsni V., Molnár Zs., Biró M. Az eurázsiai hód, egy régi-új szereplő a fásszárú-növényzet alakításában és a helyi ember életében. XII. Aktuális flóra- és vegetációkutatás a Kárpát-medencében, nemzetközi konferencia, Debrecen, Hungary. 23-25. February, 2018. (poster)
- Ulicsni V., Avar Á., Babai D. Konfliktusok gazdálkodók és vadon élő állatfajok között mint a fajismeret tényezői, valamint azok gazdasági és kulturális eredete. Állati jelek, képek és terek konferencia Szeged, Hungary. 17-18. November, 2017. (oral presentation)
- Diós K., Ulicsni V., Molnár Zs. „Ez magától úgyse fog innen kimenni, de miért is tenné?” - konfliktusok hátterének feltárása az aranykakác kapcsán. XI. Magyar Természetvédelmi Biológiai Konferencia: „Sikerek és tanulságok a természetvédelemben” Eger, Hungary. 2-5. November, 2017. (poster)
- Juhász E., Babai D., Ulicsni V., Molnár Zs., Czabán D., Biró M. Ökológiai és társadalomtudományi módszerek alkalmazása az eurázsiai hód (*Castor fiber*) környezeti hatásának vizsgálatában. XI. Magyar Természetvédelmi Biológiai Konferencia: „Sikerek és tanulságok a természetvédelemben” Eger, Hungary. 2-5. November, 2017. (poster)
- Molnár Zs., Varga A., Babai D., Demeter L., Öllerer K., Ulicsni V., Biró M. Legeltetés hatása nem-konvencionális legelőterületeken (mocsarakban, erdőkben). XI. Magyar Természetvédelmi Biológiai Konferencia: „Sikerek és tanulságok a természetvédelemben” Eger, Hungary. 2-5. November, 2017. (poster)

- Ujházi N., Babai D., Molnár Zs., Bíró M., Demeter L., Gellény K., Ulicsni V., Hollós R., Molnár Á., Margóczy K., Béres S., Horváth D., Horváth M., Samu ZT., Juhász M., Juhászné Türke I., Miókovics E., Varga A. Táj és legeltetés - a Kárpát-medence legeltetési rendszereinek élőhely-használata In: Ladányi Zsuzsanna, Blanka Viktória (szerk.) VII. Magyar Tájökológia Konferencia: Interdiszciplináris táj kutatás a XXI. században. Szeged, Hungary. 25-27. May, 2017. (oral presentation)
- Bíró M., Babai D., Molnár Zs., Demeter L., Gellény K., Miókovics E., Molnár Á., Molnár K., Ujházy N., Ulicsni V., Varga A. Importance of non-conventional pasture types for traditional grazing (1940-2014) in East-Central Europe: implications for conservation. Nyitra, 2nd TEKedu V4. Traditional ecological knowledge and oral history: Improving landscape research, conservation management and environmental education. Short international course and seminar for Visegrad 4 countries. Nitra, Slovakia. 20-21. April, 2017. (oral presentation)
- Ulicsni V. „The warty frog is dangerous, maleficent kind”. The significance and importance of ethnozoology in the 21st century. Ethnobiology Seminar “From historical studies to neglected fields in ethnobiology and ethnoecology”, Wrocław, Poland. 3-4. December, 2016. (oral presentation)
- Molnár Zs., Varga A., Babai D., Molnár K., Ulicsni V., Demeter L., Gellény K., Bíró M. Nature as source of knowledge: traditional ecological knowledge of herders and farmers and its uses in environmental education. International Environmental Education Conference : IEEC 2016: tools and aims in environmental education. Eger, Hungary. 26-29. April, 2016. (poster)
- Ulicsni V., Molnár Zs. „Most nem szabad fogni, mert hasas” Hagyományos tudás és fenntartható erőforrás-használat az ürge kapcsán. X. Magyar Természetvédelmi Biológiai Konferencia: Műhelytalálkozó „Zászlóshajók, karizmák és esernyők: mit tehet az emlőskutatás a természetvédelemért” Mórahalom, Hungary. 1-3. April, 2016. (poster)
- Molnár Zs., Molnár K., Ulicsni V., Bíró M., Babai D., Varga A., Demeter L., Gellény K., Ujházy N., Berkes F. Role of Traditional Ecological Knowledge in Linking Cultural and Natural Capital in Cultural Landscapes. Kolozsvári Magyar Egyetemi Intézet, Culture and Nature in Transylvania, international workshop, Cluj-Napoca, Romania. 22-24. April, 2016. (oral presentation)
- Molnár Zs., Bíró M., Varga A., Demeter L., Ulicsni V., Babai D. Role of Traditional Ecological Knowledge in Nature Protected Cultural Landscapes. 2nd Symposium on Nature Conservation: „Nature conservation – experiences and perspectives“. Novi Sad, Serbia. 1-2. April, 2016. (oral presentation)
- Ulicsni V. Traditional knowledge of wild animals: a potential source of knowledge for zoology, education and nature conservation. Traditional Ecological Knowledge and Oral History: Improving Landscape Research, Conservation Management and Environmental Education. Nitra, Slovakia. 14-15. April, 2016. (oral presentation)
- Molnár Zs., Ulicsni V. Hagyományos tudás az ürgéről. Az Év Emlőse: az ürge - ürgekutatás-konferencia. Fővárosi Állat- és Növénykert. Budapest, Hungary. 3. November, 2015. (oral presentation)
- Varga A., Bíró É., Bódis J., Babai D., Ulicsni V., Miókovics E., Molnár Cs., Ujházy N., Margóczy K., Molnár Zs. Táj és Ember Népfőiskola szerepe a szemléletváltásban – hagyományos tudás kutatása és gyakorlata a természetvédelemben. Aktuális Flóra- és Vegetációkutatás a Kárpát-medencében X. Sopron, Hungary. 7-9. March, 2014. (poster)
- Molnár Zsolt, Babai Dániel, Varga Anna, Ulicsni V. Traditional ecological knowledge of Hungarian farmers and its use in nature conservation and education. Farmer’s ecology, Valencia, Spain. 19. October, 2012. (oral presentation)
- Ulicsni V. Hungarian farmers’ and herders’ ethnozoological knowledge (mainly concerning invertebrates). 2nd Eastern European Ethnobiology Workshop, Királyrét, Hungary. 13-16. October, 2011. (oral presentation)