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Traditional Ecological Knowledge in Connection with Non-Domesticated Animals in the Slovenian and Hungarian Borderland

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Abstract: Although a significant proportion of folk knowledge of nature concerns knowledge of invertebrates and vertebrates living in the wild, very little ethnozoological research has been carried out in Central Europe focusing on the whole fauna. In writing the present paper, our aim was to contribute to filling this gap by interviewing 40 local farmers who are particularly knowledgeable on this topic, half of them from the Őrség region of Hungary, and half from the neighboring villages in Slovenia, and by recording their knowledge with respect to non-domesticated animals.

Our research identified the second highest number of taxa (242 species-level folk taxa) in terms of investigations carried out in the Hungarian language area in relation to the entire fauna. These included 129 invertebrate folk taxa, 73% of which were called by a species-specific name. They also included 109 vertebrate folk taxa, 103 of which had a separate species-level local name. In the case of two groups (butterflies and mammals), we also investigated attributes that were important and salient from the point of view of species knowledge: morphology and size were of particular relevance in relation to mammal species; while salient habitat features and frequency were relevant in relation to butterfly species. In the case of both groups, usefulness was the least important factor.

Despite the general erosion of traditional ecological knowledge in Europe, these recently collected data indicate that a rich, vibrant knowledge is still to be found among the Hungarians whom we interviewed in the Őrség region and the neighboring villages in Slovenia. The especially large number of recorded folk taxa, and the accurate knowledge required to differentiate between them confirm, that even today it is worth carrying out investigations on this topic in East Central Europe in the interests of obtaining knowledge of, and conserving cultural and natural values.

Keywords: ethnozoology, folk taxonomy, Őrség, species knowledge, traditional ecological knowledge (TEK), borderland

INTRODUCTION

A knowledge of biodiversity — the plants, animals, and fungi living in the wild — has always been indispensable for the efficient use of resources in farming communities and for sustainable lifestyles throughout generations (Berkes 2012). In most instances, individual species are differentiated and classified according to three main principles: the animals' morphological appearance (e.g. size, shape, color); their ecological salience (e.g. behavior); and their cultural significance (in particular, their supposed or actual usefulness or harmfulness) (Hunn 1982). Likewise, according to Hunn (1999), the morphological point of view, including physical size, along with the potential harm an animal might do, are the most important factors in relation to the extent of species knowledge.

However, as a result of rapid urbanization throughout the world and the disappearance of daily contact with the natural environment, this knowledge is becoming less and less important and will eventually be lost. Despite this, folk knowledge of wild animals is generally a less popular topic that is investigated by only relatively few people, mainly with a focus on the tropics and on vertebrate species, along with their uses (e.g. Costa-Neto 1998; Kutalek – Kassa 2005; Walker 2000; Estabrook 2008). Works that describe large numbers of folk animal species also chiefly concern vertebrates (Rea 1998, 2007; Diamond – Bishop 1999), and only a very few works have been published on invertebrate fauna in its entirety, for example in Honduras (Bentley – Rodríguez 2001), Tanzania (Hemp 2001), and Kenya (Wepukhulu 1992). Investigations in Europe also tend to concentrate on smaller taxonomic groups, or a few prominent species (e.g. Benítez 2011; Svanberg 2006; Lescureux 2010; Ceríaco et al. 2011). Another area of investigation is the semiotic characterization of invertebrates (especially in terms of predictions related to the weather) (e.g. Costa-Neto 2006).

In Eurasia, remarkably few works have been written dealing with many animal species simultaneously. The most comprehensive study is a book by Fridell and Svanberg, published in 2007, on Swedish ethnozoological knowledge. Ceríaco likewise examines a larger number of taxa in his work on amphibians and reptiles (Ceríaco 2012).

In the Hungarian language area, also, there are only a few examples of research on folk knowledge in relation to the whole fauna (Kovács 1987 – Felső-Szigetköz, Hungary; Gub 1996 – Sóvidék, Romania). Invertebrates are particularly underrepresented in ethnozoological studies, since research in this field demands a species knowledge that often goes beyond the erudition of ecologists not specializing in the given taxon group (e.g. in the case of the order Diptera, the number of species known to the local population even exceeds the number required in university ecological training [Ulicsni et al. 2016]).

The goal of the present work was to contribute to filling this gap by interviewing 40 local farmers who are particularly knowledgeable on this topic, half of them from the Őrség region of Hungary and half from the neighboring villages in Slovenia, and recording the part of their knowledge related to non-domesticated animals. Although our work can in no way be regarded as exhaustive, it enumerates the second largest number of taxa (242 species-level folk taxa) compared to studies that have been carried out in connection with knowledge of the whole fauna in the Hungarian language area. The only work that describes larger numbers of species is the volume by Gub, published in 1996 in relation to Sóvidék, Transylvania, where 335 folk taxa were recorded from interviews with 307 inhabitants in 14 settlements.

The data collection took place among people of Hungarian nationality and Hungarian-speaking interviewees involved in extensive agriculture in villages in Slovenia and Hungary (in the territory covered by the Őrség National Park and the Goričko Natural Park). Since the interviewees spent (spend) a lot of their time in agricultural areas and forests in connection with their daily activities, their relationship with the natural environment was (is) both regular and immediate (Ispán et al. 2018). This has been the case for many generations. As a result, besides personal experience, a significant proportion of their knowledge has also been passed down (Hoppál 1982). Alongside personal experience and handed-down knowledge, only a very little of their knowledge comes from academic teaching or the reading of specialist literature (Babai et al. 2019).

In relation to the non-domesticated animal species in the vicinity of the settlements and in the villages themselves, we investigated which species were known to our interviewees, which folk taxa they identified, and which names they used. Our preliminary hypothesis was that, despite the significantly different forms of land use that followed the defining of the boundaries in the 1920s, the basic knowledge of the population, who had been engaged in relatively homogeneous farming activities, would remain relatively similar, and that, as a result, we would record a largely similar knowledge of species. Among other things, we based our hypothesis — that two-thirds of the knowledge of species would be predictable and common — on the fact that the area's natural geographical and ecological relations did not change along with its borders, and that earlier investigations in the case of distant regions of the Carpathian Basin characterized by significantly different land use also indicated a significant proportion of common species knowledge (Ulicsni et al. 2016, 2019). In some cases, traditional ecological knowledge is rather conservative: there are many mechanisms in its operation that slow down the pace of change (Hewlett – Cavalli-Sforza 1986), and it typically survives and is handed down over centuries (Zent 2013). Besides, even if the frequency of an individual species has changed to a significant extent on the two sides of the border in the past one hundred years, the species composition, by contrast, has been less influenced by changes in land use. Our further aim was to explore the potential impacts that nature conservation activities, carried out with significantly different degrees of intensity, and the changes that have taken place in land use in the two countries, have had on species knowledge. For this purpose, besides the documentation of folk taxa, in the case of two taxon groups (butterflies and mammals) we also explored the reasons behind the knowledge of them.

MATERIAL AND METHODOLOGY

The examined areas

The examined areas, which are essentially hilly landscapes on both the Slovenian and Hungarian sides of the border (between 190 and 380 m above sea level), are characterized by a moderately continental, mildly subalpine climate. The average temperature varies between 9.1 and 9.8°C, and the annual amount of rainfall is between 760 and 800 mm (Dövényi 2010), approximately 600 mm of which falls in the vegetation periods (Hahn et al. 2012).

In terms of the predominant, primary vegetation cover, deciduous oak and beech forests are typical of the enclosed mountains (hornbeam and oak forests: *Quercus petraea – Carpinetum*; beech forests: *Fagion illirycum*), where, alongside the dominant sessile oak (*Quercus petraea*), the pedunculate oak (*Quercus robur*), beech (*Fagus sylvatica*), and hornbeam (*Carpinus betulus*) are also to be found in large numbers. However, anthropological land transformation activities have had an enormous impact on this primary vegetation cover, resulting initially in a significant increase in the proportion of open, grassland areas, and subsequently in substantial areas of the landscape being given over to arable farming (Bartha 2016).

Alongside the majority of the fauna that is typical of a moderately continental climate, subalpine animal species are also present in the area. These include many protected species that are valuable from a nature conservation point of view, which are connected with agricultural cultivation on small plots, a form of farming that has been abandoned to a significant extent throughout Europe. As one of the best-preserved cultural landscapes in Central Europe (Kaligarič et al. 2008), the Őrség region and Goričko play an important role in the protection of these species. The approximately 1,500 species of Lepidoptera found in the region (Víg 1998) and the number of dragonfly species at regional level in Hungary, are the highest here, thus nature conservation attracts particular attention (Ambrus et al. 1995; Víg 1998). Among the vertebrates, the highly protected Corncrake (*Crex crex*), the Eurasian otter (*Lutra lutra*), and the Italian crested newt (*Triturus carnifex*), a subalpine animal species that reaches the easternmost limit of its spread in this area, are of particular significance (Víg 2003).

Material and methodology

Data collection took place in Slovenia in April (3 fieldwork days) and July (8 fieldwork days) 2018, and in Hungary in June 2019 (10 fieldwork days). The number of interviewees in each individual settlement in Slovenia was as follows: Prosenjakovci (Pártosfalva) – 9; Središče (Szerdahely) – 6; Motvarjevci (Szentlászló) – 3; Hodoš (Őrihodos) – 1; Ivanjševci (Alsójánosfa) – 1. In Hungary, the distribution was as follows: Őriszentpéter – 7; Nagyrákos – 5; Szalafő – 3; Kerkáskápolna – 2; Kisrákos – 1; Viszák – 1; Magyarszombatfa – 1. The average age of the interviewees was 75 in Slovenia (the youngest being 53 and the oldest 92); and 79 in Hungary (where the youngest was 67 and oldest 91).

Our objective was not to record average knowledge, but to identify those people with the greatest knowledge on this topic in the two regions. The knowledge held by these particularly knowledgeable interviewees encompasses the vast majority of the knowledge held by local people with average or little knowledge of the subject (Ulicsni et al. 2020), thus, if we are primarily studying overall knowledge, as in the present paper, it is more efficient to interview these people. Among the interviewees, only one from the Őrség region had completed secondary school and one interviewee from Slovenia had completed college: the proportion of animal knowledge obtained by means of education was insignificant among the interviewees.

The data collection was carried out in Hungary using a snowball sampling method, starting from the best data providers identified on the basis of earlier investigations into traditional knowledge, performed by a local nature conservation engineer and the head of the Nature Conservation Department at the Őrség National Park. In Slovenia, data collection was also carried out using snowball sampling, beginning with data providers identified by the director of a documentary film on the knowledge and customs of the local population, and a Reformed Church pastor. We informed the interviewees in advance about the research and about the goal of the interviews, and we made audio recordings only if prior permission was given.

The principal means of data collection were indoor interviews (30 hours in Slovenia, 32 hours in Hungary), which were recorded by dictaphone. These interviews comprised semi-structured elements and free-flowing conversation, by means of which, in the first round, it was possible to perform identifications of species-level folk taxa. A collection of pictures of the species occurring in the examined region contributed to accurate identification (10 to 15 photographs of various different species were printed on one A4 sheet). In cases where conflicting descriptions/profiles were provided by the interviewees, the classification was confirmed by means of cross-questions aimed at specific characteristics that would accurately identify the given taxa.

In the case of the two groups that were studied in detail (butterflies and mammals), we investigated those characteristics that were found to be most important from the perspective of salience in the course of studies of the whole fauna (e.g. Hunn 1999; Ellen 2006; Ulicsni et al. 2019). The investigation of these aspects is particularly important, because, among other things, the (at least partial) investigation of the reasons behind species knowledge contributes to an understanding of the manner in which knowledge is constructed; recognizing the most important perspectives from the point of view of the local population contributes to a knowledge of their world view; and, especially in the case of key species, it can help us in the management of potential (nature conservation) conflicts. The 10 most important aspects in terms of salience were the following: physical size, morphological salience, ethological characteristics, frequency, habitat, danger to human beings, harmfulness, usefulness, richness of folklore, and significance in terms of nature conservation. In the case of each of these aspects, we established six categories to express the relationship between the given species and the local human population (0: no relationship; 1: species with little significance – 5: species with great significance).

In determining the size of the species, we took relative size into account separately within the butterflies and mammals. In the event of uncertainty, we took as the basis the ontogenetic phase with which members of the local population were most likely to be familiar. In the case of morphological salience, we divided the species into five categories on the basis of conspicuous color, the special nature of the surface/body (typical, striking, unusual, strange), and difference from the average (rounded) morphology. Ethological characteristics were assessed on the basis of sound, smell, agility, and conspicuousness. In determining the prevalence of individual taxa, we took into account their local prevalence, based on our own experience and the scientific literature (Bálint 1994; Ambrus et al. 1995; Víg 1999, 2003). In defining habitat, we took into consideration the possibilities for, and frequency of, encounters with human beings. The degree of danger to human beings ranged from being a minor nuisance to creating intolerable disturbance, and even causing death. Harmfulness and usefulness were exclusively related to damage or benefits in relation to domestic animals, cultivated plants, or other human property. By means of the folklore/attitude category, we studied subjective relationships with the examined animal species, as well as the diversity of their appearance in the folklore genres of the rural and urban environment. When classified according to their significance for nature conservation, the species were evaluated as follows: 0: alien or indigenous species needing to be culled; 1: indigenous species that occasionally cause damage, that are neither protected nor endangered; 2: species that require protection, that are not endangered or that are only slightly endangered, and that cannot be legally hunted; 3: species accorded protection as hunting assets or for other reasons; 4: vulnerable species that are officially protected in Hungary; and 5: highly endangered species that enjoy a high level of protection.

Uncertainties in classification were eliminated by means of iteration. In the case of each individual species, we surveyed the related literature. The first classification was performed by Dániel Babai and Zsolt Molnár, who did not participate in the ethnozoological collection; and the two authors (with the help of Zsolt Molnár) worked on the finalization of the scores, which we accepted only in the case of unanimity. We added together the given scores in the different categories (0–6) by aspect (e.g. size, usefulness, etc.), and then compared these scores.

RESULTS

In the examined communities, we successfully classified a total of 242 scientific taxa that could be identified with species-level folk taxa. Fifty-five percent of the taxa — that is, 133 taxa, were invertebrates, while 109 (45%) were vertebrates (Table 1). The number of folk species known in Hungary and Slovenia was largely the same (210 and 202 respectively), and the proportions of species likewise differed only slightly: In Slovenia, vertebrates amounted to 49% (98 taxa), while in Hungary they amounted to 45% (94 taxa), compared to 104 and 116 invertebrate taxa respectively. With respect to mammals, the same 28 species were known in the two regions, while in the case of invertebrates, we discovered a relatively large number of taxa that were known in only one of the regions (35%, 46 taxa). Out of the 242 taxa, 162 (67%) could be associated with biological

Table 1. The proportion of scientific taxa belonging to different taxonomic groups that can be identified with species-level folk taxa in the examined groups

taxonomic group	mentioned exclusively in Slovenia	mentioned exclusively in Hungary	mentioned in both countries	total
mammals	0	0	28	28
birds	10	9	38	57
reptiles	0	0	7	7
amphibians	1	2	6	9
fish	4	0	4	8
invertebrates	17	29	87	133
total	32	40	170	242

species, and 76 were folk species that embraced several biological species, while in a few instances (4 folk species, 2%), sub-scientific, over-differentiated species were also found. A folk classification that did not fit precisely into this scientific system, or that went beyond the scientific taxonomy, was identified in the case of the Northern white-breasted hedgehog (*Erinaceus roumanicus*). In this case, a so-called dog-like or pig-like taxon was distinguished within the species in both regions.

In the case of mammals, the most important salient features in terms of species knowledge were morphological salience and size (highest total salience values, see Table 2), although frequency, ethological salience, and habitat salience came closely behind this value. By contrast, in the case of butterflies, habitat salience and frequency counted as the key aspects, although alongside these, morphology, ethological salience, and size were likewise important in relation to knowledge of species (Table 3). Harmfulness played a medium role in the case of both taxa in relation to species knowledge, while, by contrast, usefulness counted as the least important distinguishing feature in the case of both groups. Importance in nature conservation and folklore/attitude were of small to medium significance in both groups in terms of distinguishing among the taxa.

From the list of folk invertebrate taxa known to the interviews, most of the species were referred to by name (129 taxa, 97%), and of these, 90 species (68%) were called by a special, species-specific name (Table 4). The list contains quite a few species, which, even though they have a simple name that is occasionally also used as a folk taxonomic (folk generic) category, nevertheless also bear the same name within a smaller taxonomic category, as a type species or as a species name in its own right. This situation is often justified by the addition of the epithet "common/true/real" (e.g. the house fly: *Musca domestica*; the turf or pavement ant: *Tetramorium caespitum* and similar species; the clothes moth: *Tineola biselliella*; etc.).

The arrangement used in the table, according to scientific taxonomic classification, largely corresponds with the folk classification, as clearly illustrated by the folk names (e.g. spiders among the arachnids). At the same time, there are several significant differences between the two systems, such as, for example, in the case of pond skaters (*Gerris* spp.), which belong among the so-called shield bugs, being classified under the folk spider taxon (this is evidenced by one of its folk names: water spider).

We also recorded a folk taxon known by the name *lobodár*, which belongs to the arthropod family and which we were unable to associate with a scientific taxon despite repeated and detailed questioning. The so-called *házi kígyó* ("house snake") is another of the taxa that we were unable to identify accurately with a scientific taxon (Table 5). With the exception of the *lobodár*, no description is given of obscure taxa that we were unable to identify accurately. The majority of taxa omitted from the classification for this reason were birds (Table 6).

Table 2. List of mammal taxa (Mammalia) known to the interviewees with their local names, in order of frequency of mention in the case of each individual taxon; estimated values of relevant properties related to the salience of the taxa; and the proportion of interviewees with knowledge of the taxon.

	scientific name	local name in Slovenia	local name in Hungary	physical size	morphological salience	ethological characteristics	frequency	habitat salience	danger to humans	harmfulness	usefulness	richness of folklore	significance in nature conservation	proportion of interviewees with knowledge of the taxon (%)
1	*Erinaceus roumanicus* ”pig like”	sündisznó, tüskésdisznó, tüskesdisznó, tüskésborz, sünmalac, süni	sündisznó, sün, süni, sünike	4	5	4	5	5	1	0	2	4	3	≥95
2	*Erinaceus roumanicus* ”dog-like”	kutyaorrú sün	kutyaorrú sün	4	5	4	5	5	1	0	1	4	3	5-40
3	*Talpa europaea*	vakond, vakkond	vakond, vakand	4	5	5	5	5	0	4	0	3	3	≥95
4	Chiroptera	denevér	denevér	3	5	5	5	5	2	0	0	5	4	≥95
5	*Sorex, Crocidura, Neomys* spp.	egér, cickán	cickány, cickán, cicka, pörszegér, güzüegér, cincér, pöhölegér, pöle	3	4	2	4	3	0	0	1	0	3	5-40
6	*Castor fiber*	hód, bover, vidra	hód	5	4	5	1	3	0	4	0	1	4	5-40
7	*Mus musculus*	egér	egér, házi egér	3	3	4	5	5	3	4	0	2	0	≥95
8	*Rattus norvegicus*	patkány, patkán	patkán, patkány	4	3	4	5	5	4	5	0	3	0	≥95
9	*Micromys minutus*	egér, pöhöl	mezei egér, pöle	3	3	3	4	3	0	1	0	0	3	5-40

	scientific name	local name in Slovenia	local name in Hungary	physical size	morphological salience	ethological characteristics	frequency	habitat salience	danger to humans	harmfulness	usefulness	richness of folklore	significance in nature conservation	proportion of interviewees with knowledge of the taxon (%)
10	*Microtus arvalis*	pocok	pocok, mezei pocok, mezei egér	3	2	2	5	4	0	4	0	0	1	5-40
11	*Apodemus agrarius, A. flavicollis, A. sylvaticus*	egér	vörös egér	3	4	3	4	2	0	0	0	0	1	≤5
12	*Microtus agrestis*	voluhár, ürge, pocok	földikutya, födikutya, pocok, vándorpocok, ürge	3	3	4	5	4	3	3	0	0	3	60-95
13	*Ondatra zibethicus*	vízipatkány, vízipatkán	pézmapatkán	4	3	4	1	2	0	0	1	0	0	≤5
14	*Glis glis*	pöhöl-féle	pöle	4	3	3	3	2	0	2	0	0	4	≤5
15	*Muscardinus avellanarius*	pöhöl, pöhő	pöhölegér, pöle, pölegér, pelé	3	3	2	3	1	0	1	0	0	4	40-60
16	*Sciurus vulgaris*	mókus, mokus, mókuska, mukus	mókus	4	5	5	4	3	0	1	0	3	3	≥95
17	*Lepus europaeus*	vadnyúl, nyúl, nyuszi	vadnyúl, nyúl, mezei nyúl, nyuszi	4	5	4	4	4	0	3	3	2	3	≥95
18	*Martes foina*	nyezsd, nyes, kuna, házi nyezsd, nyest, kuna belica	nyest	4	4	4	4	5	0	4	1	0	1	60-95

	scientific name	local name in Slovenia	local name in Hungary	physical size	morphological salience	ethological characteristics	frequency	habitat salience	danger to humans	harmfulness	usefulness	richness of folklore	significance in nature conservation	proportion of interviewees with knowledge of the taxon (%)
19	*Martes martes*	erdei nyezsd, nyezsd, kuna zlatica	nyuszt	4	4	2	2	1	0	1	0	0	4	5-40
20	*Mustela putorius*	görény, göriny, görén, dihúr, diur	görény	4	4	3	3	4	0	4	1	2	1	60-95
21	*Mustela nivalis*	menyedasszony, mönyedasszony, mönyedasszon, menyédasszon	mönyedasszon, menyedasszony, menyét, mönyed, nyérc, nerc	4	3	5	3	4	0	3	0	1	2	60-95
22	*Meles meles*	evüborz, ebüborz, borz, ebiborz	borz	5	5	4	4	3	1	3	0	0	1	60-95
23	*Lutra lutra*	vidra	vidra	5	4	3	3	3	0	4	0	0	5	5-40
24	*Vulpes vulpes*	róka, liszica	róka	5	5	3	5	4	2	5	2	5	0	≥95
25	*Canis aureus*	sakál	sakál, farkas, sakálfarkas	5	4	4	2	2	2	3	0	1	2	5-40
26	*Sus scrofa*	vaddisznó, disznó	vaddisznó	5	5	4	5	3	5	5	4	2	0	≥95
27	*Capreolus capreolus*	őz, őzike	őz, őzike	5	5	5	5	4	1	3	4	2	1	≥95
28	*Cervus elaphus*	szarvas	szarvas	5	5	4	5	3	2	4	4	5	1	≥95
		összesen		112	113	102	106	97	27	67	45	24	60	

Table 3. List of butterfly (Lepidoptera) taxa known to the interviewees with their local names, in order of frequency of mention in the case of each individual taxon; estimated values of relevant properties related to the salience of the taxa; and the proportion of interviewees with knowledge of the taxon.

	scientific name	local name in Slovenia	local name in Hungary	physical size	morphological salience	ethological characteristics	frequency	habitat salience	danger to humans	harmfulness	usefulness	richness of folklore	significance in nature conservation	proportion of interviewees with knowledge of the taxon (%)
1	*Erinaceus roumanicus* ”pig like”	sündisznó, tüskésdisznó, tüskesdisznó, tüskésborz, sünmalac, süni	sündisznó, sün, süni, sünike	4	5	4	5	5	1	0	2	4	3	≥95
2	*Erinaceus roumanicus* ”dog-like”	kutyaorrú sün	kutyaorrú sün	4	5	4	5	5	1	0	1	4	3	5-40
3	*Talpa europaea*	vakond, vakkond	vakond, vakand	4	5	5	5	5	0	4	0	3	3	≥95
4	Chiroptera	denevér	denevér	3	5	5	5	5	2	0	0	5	4	≥95
5	*Sorex, Crocidura, Neomys* spp.	egér, cickán	cickány, cickán, cicka, pörszegér, güzüegér, cincér, pöhölegér, pöle	3	4	2	4	3	0	0	1	0	3	5-40
6	*Castor fiber*	hód, bover, vidra	hód	5	4	5	1	3	0	4	0	1	4	5-40
7	*Mus musculus*	egér	egér, házi egér	3	3	4	5	5	3	4	0	2	0	≥95
8	*Rattus norvegicus*	patkány, patkán	patkán, patkány	4	3	4	5	5	4	5	0	3	0	≥95
9	*Micromys minutus*	egér, pöhöl	mezei egér, pöle	3	3	3	4	3	0	1	0	0	3	5-40
10	*Microtus arvalis*	pocok	pocok, mezei pocok, mezei egér	3	2	2	5	4	0	4	0	0	1	5-40

	scientific name	local name in Slovenia	local name in Hungary	physical size	morphological salience	ethological characteristics	frequency	habitat salience	danger to humans	harmfulness	usefulness	richness of folklore	significance in nature conservation	proportion of interviewees with knowledge of the taxon (%)
11	*Apodemus agrarius, A. flavicollis, A. sylvaticus*	egér	vörös egér	3	4	3	4	2	0	0	0	0	1	≤5
12	*Microtus agrestis*	voluhár, ürge, pocok	földikutya, fődikutya, pocok, vándorpocok, ürge	3	3	4	5	4	3	3	0	0	3	60-95
13	*Ondatra zibethicus*	vízipatkány, vízipatkán	pézmapatkán	4	3	4	1	2	0	0	1	0	0	≤5
14	*Glis glis*	pöhöl-féle	pöle	4	3	3	3	2	0	2	0	0	4	≤5
15	*Muscardinus avellanarius*	pöhöl, pöhő	pöhölegér, pöle, pölegér, pelé	3	3	2	3	1	0	1	0	0	4	40-60
16	*Sciurus vulgaris*	mókus, mokus, mókuska, mukus	mókus	4	5	5	4	3	0	1	0	3	3	≥95
17	*Lepus europaeus*	vadnyúl, nyúl, nyuszi	vadnyúl, nyúl, mezei nyúl, nyuszi	4	5	4	4	4	0	3	3	2	3	≥95
18	*Martes foina*	nyezsd, nyes, kuna, házi nyezsd, nyest, kuna belica	nyest	4	4	4	4	5	0	4	1	0	1	60-95
19	*Martes martes*	erdei nyezsd, nyezsd, kuna zlatica	nyuszt	4	4	2	2	1	0	1	0	0	4	5-40
20	*Mustela putorius*	görény, göriny, görén, dihúr, diur	görény	4	4	3	3	4	0	4	1	2	1	60-95

	scientific name	local name in Slovenia	local name in Hungary	physical size	morphological salience	ethological characteristics	frequency	habitat salience	danger to humans	harmfulness	usefulness	richness of folklore	significance in nature conservation	proportion of interviewees with knowledge of the taxon (%)
21	*Mustela nivalis*	menyedasszony, mönyedasszony, mönyedasszon, menyédasszon	mönyedasszon, menyedasszony, menyét, mönyed, nyérc, nerc	4	3	5	3	4	0	3	0	1	2	60-95
22	*Meles meles*	evüborz, ebüborz, borz, ebiborz	borz	5	5	4	4	3	1	3	0	0	1	60-95
23	*Lutra lutra*	vidra	vidra	5	4	3	3	3	0	4	0	0	5	5-40
24	*Vulpes vulpes*	róka, liszica	róka	5	5	3	5	4	2	5	2	5	0	≥95
25	*Canis aureus*	sakál	sakál, farkas, sakálfarkas	5	4	4	2	2	2	3	0	1	2	5-40
26	*Sus scrofa*	vaddisznó, disznó	vaddisznó	5	5	4	5	3	5	5	4	2	0	≥95
27	*Capreolus capreolus*	őz, őzike	őz, őzike	5	5	5	5	4	1	3	4	2	1	≥95
28	*Cervus elaphus*	szarvas	szarvas	5	5	4	5	3	2	4	4	5	1	≥95
		összesen		112	113	102	106	97	27	67	45	24	60	

Table 4. List of the invertebrate taxa (excluding butterflies) known to the interviewees, with their local names, given in the order of frequency with which they were mentioned in the case of each individual taxon. (* – correctly known taxon, but not called by its name in the given region; % – proportion of interviewees with knowledge of the taxon)

	scientific name	local name in Slovenia	local name in Hungary	%
	Myriapoda			
1	Julidae e.g. *Megaphyllum unilineatum*	*	*	≤5
2	*Lithobius* spp. e.g. *Lithobius forficatus*	százlábú, sztonoga	százlábú	5-40
	Arachnida			
1	*Ixodes* spp. e.g. *Ixodes ricinus*	kullancs, kulláncs	kullancs, kulláncs	≥95
2	*Tetranychus urticae*	-	*	≤5
3	*Varroa destructor*	-	atka, méhatka	≤5
4	Araneae e.g. *Tegenaria domestica*	pók	pók	≥95
5	*Misumena vatia*	mérgespók	-	≤5
6	*Araneus* spp. e.g. *Araneus diadematus*	keresztespók	keresztespók	5-40
7	Pholcidae e.g. *Holocnemus pluchei,* Opiliones e.g. *Phalangium opilio*	pók	kaszáspók	40-60
	Crustacea			
1	*Astacus astacus*	rák	rák	≥95
2	Oniscidea e.g. *Armadillidium vulgare*	*	pincebogár	5-40
	Orthoptera			
1	*Tettigonia viridissima*	sáska, kaszás, ződ kaszás	sáska, kaszás	60-95
2	*Oecanthus pellucens*	csűrbogár	-	≤5
3	Caelifera e.g. *Calliptamus italicus*	szecsku, szöcske	szöcske, szecsku, sáska	40-60
4	*Gryllus campestris*	tücsök, cslicsek	tücsök, pücsök	≥95
5	*Gryllotalpa gryllotalpa*	lóbogár, lótetű, lútetű	lótetű	60-95
	Hemiptera			
1	*Gerris* spp. e.g. *Gerris paludum*	víziszöcske	vizipók, víziborjú (sic!), pók	5-40
2	*Pyrrhocoris apterus*	*	bodobácsbogár, baszóbogár, bodobács	60-95
3	*Eurydema ornata*	-	káposztapoloska	≤5

	scientific name	local name in Slovenia	local name in Hungary	%
4	*Dolycoris baccarum* and similar species	büdösbákó, büdösbáku, büdöske	büdösmargit, margitbogár, büdösbogár, kalamászbogár, marinka, büdösbence, büdösmátyás	≥95
5	Cercopidae e.g. *Philaenus spumarius*	hab, ökörnyál	hab	60-95
6	*Cimex lectularius*	poloska	-	60-95
	Coleoptera			
1	Carabidae e.g. *Zabrus tenebrioides*	géber	géber, bogár	5-40
2	Geotrupes spp. e.g. *Geotrupes vernalis*	galacsinhajtó	ganajtúró bogár, szartúró bogár	60-95
3	*Leptinotarsa decemlineata*	krumplibogár	krumplibogár, korodádó, kororádóbogár	≥95
4	*Chaetocnema* spp., *Phyllotrema* spp. e.g. *Chaetocnema tibialis*	-	balha, káposztabolha	5-40
5	*Tenebrio molitor*	-	lisztféreg	≤5
6	Curculionidae e.g. *Larinus turbinatus*	-	*	≤5
7	*Ceutorhynchus macula-alba*	-	bogár	≤5
8	*Sitophilus granarius*	zsizsik	zsizsik, gabonazsizsik	5-40
9	*Bruchus pisorum, Acanthoscelides obtectus*	zsizsik	zsizsik	5-40
10	*Lytta vesicatoria*	kőrisbogár, büdösbogár	kőrisbogár	5-40
11	*Melolontha melolontha*	cserebogár, csimmasz, csimmaz	cserebogár, csimmasz	≥95
12	*Cerambyx cerdo* and similar species	-	cincér, hőscincér, facincér	5-40
13	*Lucanus cervus*	istenökre, szarvasbogár	szarvasbogár, istenökre	≥95
14	*Coccinella septempunctata, C. magnifica*	bödebence, katicabogár	bödebence, katicabogár, katica, rendes katica	≥95
15	*Harmoia axyridis*	bödebence, katicabogár, bödebogár	bödebence	40-60
16	*Psyllobora vigintiduopunctata*	-	sárga katicabogár	≤5
17	*Lymexylon navale*	-	hajófúró bogár	≤5
18	*Cetonia aurata* and Protaetia e.g. *Protaetia affinis*	szentjánosbogár	szentjánosbogár, rózsabogár	60-95

	scientific name	local name in Slovenia	local name in Hungary	%
19	*Lampyris noctiluca, Lamprohiza splendidula*	szentjánosbogár, szentivánbogár, ivánbogár	szentjánosbogár	≥95
20	*Ips* spp. e.g. *Ips typographus*	szú	szu, szú, faszú	60-95
21	*Anobium punctatum*	-	faszú, szú	≤5
22	*Blaps* spp. e.g. Blaps lethifera	büdösbogár, keserűbogár	büdösbogár, pincebogár	5-40
23	*Agriotes* spp. e.g. *Agriotes sputator*	drótféreg, szárazféreg	drótféreg	5-40
	Hymenoptera			
1	*Apis mellifera*	méhe, méhecske, méh	méh, méhe, háziméhe, méhi	≥95
2	*Apis mellifera* var. *ligustica*	-	vadméhe	5-40
3	Andrenidae, Colletidae, Melittidae, Halictidae, Megachilidae	földiméhe	földiméhe, földiméhi	5-40
4	Halictidae e.g. *Halictus sexcinctus*	-	vadméhe, méh, méhe, földiméhe	≤5
5	*Bombus terrestris* and similar species	dongó, földiméhe, fődiméhe, földiméh	fődiméhe, poszméh, földiméhi	60-95
6	*Tetramorium caespitum* and similar species	hangya	hangya	≥95
7	*Formica rufa*	vöröshangya	hangya	5-40
8	ants from different species and casts with wings	szárnyashangya	szárnyashangya	60-95
9	*Camponotus* spp. e.g. *Camponotus ligniperda*	nagy fekete hangya	nagy fekete hangya	60-95
10	*Lasius flavus, L. umbratus*	vöröshangya	vöröshangya	60-95
11	*Sceliphron destillatorium*	szakandék	-	≤5
12	*Vespa crabro*	darázs, lódarázs	lódarázs, darázs, szakadék, méhfarkas	≥95
13	*Vespula vulgaris, Paravespula germanica*	szakandik, szakandék	darázs, szakadék	≥95
14	*Polistes gallicus*	szakandik, szakandék	kecskedarázs, szakadék	≤5
15	*Cynips quercusfolii*	gubacs, gubola	-	5-40
16	*Rhodites rosae*	*	*	5-40
17	*Andricus hungaricus*	*	gubacs, guba	60-95
	Diptera			
1	*Aedes* spp. and similar species	szúnyog, szunyog	szunyog	≥95

	scientific name	local name in Slovenia	local name in Hungary	%
2	*Tipula* spp. e.g. *Tipula maxima*	szunyog	szunyog, vacsoravesztő, szitakötő	60-95
3	Ceratopogonidae e.g. *Culicoides imicola*	muslinca, muszlinca	*	5-40
4	*Drosophila* spp. e.g. *Drosophila melanogaster*	muslinca, muslica, muszlinca	muszlinca	≥95
5	Psychodidae e.g. *Clogmia albipunctata*	lepke	-	≤5
6	*Braula coeca*	baroza	-	≤5
7	*Haematopota* spp. e.g. *Haematopota pluvialis*	dongó	katonadongó	60-95
8	*Tabanus bovinus*	dongó, lódongó	dongó, bögöly	≥95
9	*Hypoderma bovis*	-	féreg, bödölle, gödölle	≤5
10	*Hypoderma diana*	*	bödölle, gödölle	5-40
11	Asilidae	légy	légy	≤5
12	*Musca domestica*	légy, házilégy	bogár, rendes légy	≥95
13	*Haematobia irritans*	-	légy	5-40
14	*Sarcophaga carnaria*	féregszaró, légy	húsbogár, dögbogár	60-95
15	*Calliphora vicina*	kék légy	húsbogár	≤5
16	*Lucilia* spp. e.g. *Lucilia caesar*	zöld légy, mészároslégy, légy	légy, dögbogár, húsbogár	60-95
17	*Chrysops* spp. e.g. *Chrysops caecutiens*	dongó	tarkaszárnyú bögöly, tarka dongó	5-40
18	*Gasterophilus intestinalis*	*	-	≤5
19	Syrphidae e.g. *Syrphus ribesii*	légy	-	≤5
20	*Hippobosca longipennis*	kutyalégy, kutyabogár	lókulláncs	5-40
21	*Rhagoletis cerasi* s.l.	-	féreg	60-95
	Insecta			
1	Aphididae e.g. *Apis pomi*	*	tetű, levéltetű, rózsatetű	5-40
2	*Myzus cerasi*	penészbogár	tetű, fekete tetű	5-40
3	Aleyrodina e.g. *Aleyrodes proletella*	-	levéltetű	5-40
4	Coccoidea e.g. *Aspidiotus nerii*	-	atka	≤5
5	*Menacanthus stramineus*	tyuktetű, tiktetű, tetű, bolha	tiktetű, tyuktetű	60-95
6	*Haematopinus suis*	tetű, disznótetű	-	5-40
7	*Bovicola bovis*	-	tehéntetű	≤5

	scientific name	local name in Slovenia	local name in Hungary	%
8	*Pediculus humanus capitis*	tetű, fejtetű	tetű, fejtetű	≥95
9	*Pediculus humanus humanus*	tetű, ruhatetű	tetű	60-95
10	*Pulex irritans*	bolha, bóha	bolha, balha	≥95
11	*Ctenocephalides canis*	bolha, kutyabolha	balha, bolha	5-40
12	*Mantis religiosa*	imádkozó sáska, bogomolka	imádkozó sáska, sáska	5-40
13	*Blatta orientalis*	csótány	géber	5-40
14	Dermaptera e.g. *Forficula auricularia*	fülbemászó, fülmászó	fülmászó, fülbemászó	60-95
15	Ephemeroptera e.g. *Ephemera danica*	-	kérész	≤5
16	Odonata e.g. *Anax imperator*	kigyupásztor, kigyópásztor, szitakötő	szitakötő, kigyupásztor	≥95
	Nematoda			
1	*Toxocara canis*	giliszta	-	5-40
2	*Toxocara cati, T. leonina*	geleszta, giliszta	-	≤5
3	*Ascaris suum*	-	orsós, giliszta, orsóféreg	5-40
4	*Dictyocaulus viviparus*	-	tüdőféreg, féreg	≤5
5	*Eisenia fetida*	-	giliszta	5-40
	Platyhelminthes			
1	*Taenia solium, Taeniarhynchus saginatus*	geleszta, pántlikgiliszta	giliszta	5-40
2	*Fasciola hepatica*	májmétel, májlepke	-	40-60
	Annelida			
1	*Lumbricus* spp. e.g. *Lumbricus terrestris*	giliszta, földigiliszta, brázdonbillegető	barázdaféreg, brázdaféreg, giliszta	≥95
2	*Hirudo officinalis, Hirudo verbana*	pióca, piuca	pióca	60-95
	Mollusca			
1	*Arion, Limax* spp. e.g. *Limax maximus*	kágyu, kágyus csiga, csigakágyu, meztelen csiga	kágyú, kágyillu, meztelen csiga, köpeszcsiga	60-95
2	*Arion lusitanicus*	vörös kágyú, vörös csiga, kágyú	kágyú, kágyillu, vörös csiga, vörös kágyú, köpeszcsiga	≥95
3	*Agriolimax agrestis*	fehér kágyu	-	≤5
4	Gastropoda e.g. *Helix pomatia*	csiga	csiga	≥95
5	*Xerolenta obvia*	csiga	csiga	5-40
6	Bivalvia e.g. *Anodonta cygnea*	kagyló	kagyló	60-95

Table 5. List of fish, amphibian, and reptile taxa known by the interviewees with their local names, given in the order of frequency with which they were mentioned in the case of each individual taxon (% – proportion of interviewees with a knowledge of the taxon)

	scientific name	**local name in Slovenia**	**local name in Hungary**	**%**
	Osteichthyes			
1	*Salmo trutta*	pisztráng	pisztráng	5-40
2	*Esox lucius*	csuka	csuka	5-40
3	*Cyprinus carpio*	ponty	ponty	60-95
4	*Scardinius erythrophthalmus* and similar species	keszeg	-	5-40
5	*Squalius cephalus*	domonkó, pénzes	pénzes	5-40
6	*Ctenopharyngodon idella*	amúr	-	≤5
7	*Barbatula barbatula, Cobitis elongatoides*	csik, picsarági	-	5-40
8	*Lota lota*	menyhal	-	≤5
	Amphibia			
1	*Triturus* spp., *Lissottriton vulgaris*	vízibornyú, gyik, mocsarád, gőte	gőte, víziborjú	5-40
2	*Salamandra salamandra*	mocsarád, mocserád	gőte, fodros szalamandra, alpesi szalamandra	5-40
3	*Bombina bombina, B. variegata*	béka	béka, unkabéka, unka	5-40
4	*Bufotes viridis (Bufo bufo)*	taracskosbéka, varangyosbéka, boszorkánybéka, bukszabéka, króta	varangyosbéka, taracskos béka, bukszabéka, varangy, torubeli béka, targyakos béka, katonabéka	≥95
5	*Bufo bufo*	-	varangy	5-40
6	*Hyla arborea*	levelibéka, béka, zöldlevelű béka, regica, regice	levelibéka, levelesbéka	≥95
7	*Rana dalmatina*	hugyosbéka	hugyosbéka, katonabéka, bubosbéka	60-95
8	*Rana arvalis*	kék béka	-	≤5
9	*Pelophylax* spp.	-	béka, kecskebéka	5-40
	Reptilia			
1	*Emys orbicularis*	teknyősbéka, teknős	teknősbéka, teknős, teknőc	60-95
2	*Lacerta agilis*	gyík, martincsek, barna gyík	gyik, gyík, szürkegyik	≥95

	scientific name	local name in Slovenia	local name in Hungary	%
3	*Lacerta viridis*	zöld gyik, gyik, gyík	zöld gyik	60-95
4	*Anguis fragilis*	vakkigyu	vakkigyó, rézsikló, lábatlan gyík, kuszma, törékenygyík	≥95
5	*Natrix natrix*	kigyu, kígyó, sikló, vízisikló, belúska, fehér fülű, csipükigyó	sikló, kígyó, vízisikló	≥95
6	*Vipera berus*	mérgeskígyó, vipera, homoki vipera, gád, virágos kigyu, csipükigyu	kigyu, kígyó, mérgeskígyó, vipera, keresztes vipera	60-95
7	”house snake”	kígyó	kígyó	60-95

Table 6. List of bird taxa known by the interviewees with their local names, given in the order of frequency with which they were mentioned in the case of each individual taxon (% – proportion of interviewees with a knowledge of the taxon)

	scientific name	local name in Slovenia	local name in Hungary	%
1	*Ardea cinerea*	szürkegém, vasgém, szürke vasgém	gém, szürkegém	5-40
2	*Ardea alba*	fehér vasgém	-	≤5
3	*Ciconia ciconia*	gólya	gólya	≥95
4	*Ciconia nigra*	feketegém	fekete gólya	5-40
5	*Anas platyrhynchos*	vadkacsa, vadréce, kacsa	vadkacsa	5-40
6	*Anser anser*	-	szürkelúd	≤5
7	*Accipiter gentilis*	kánya, igazi kánya	kánya, vércse, héja	60-95
8	*Buteo buteo*	nyulászkánya, nyulászókánya	nyulászó kánya, egerészölyv, kánya, ölyv, rétisas, sas	5-40
9	*Falco tinnunculus*	vércse	vércse	5-40
10	*Phasianus colchicus*	fácány, fácán	fácán	≥95
11	*Perdix perdix*	fogoly	fogoly, fogolymadár	60-95
12	*Coturnix coturnix*	pitypalaty, fürj	fürj, pitypalaty	40-60
13	*Tetrao urogallus*	vadkakas	fajd, fajdkakas	5-40
14	*Crex crex*	-	haris	≤5
15	*Streptopelia turtur*	vadgalamb	vadgalamb	5-40
16	*Streptopelia decaocto*	gelice, gerlice, vadgerlice	gerlice, galamb	≥95
17	*Columba palumbus*	vadgalamb, pudpudum szidi	vadgalamb	5-40

	scientific name	local name in Slovenia	local name in Hungary	%
18	*Asio otus*	bagoly, bagó, szürkebagoly, fülesbagoly, nagyorrú bagó,	bagoly, fülesbagoly, huhu, uhu	≥95
19	*Athene noctua*	halálbagoly	halálmadár	5-40
20	*Tyto alba*	-	hóbagoly	≤5
21	*Scolopax rusticola*	szalonka, szloka, szlokom	szalonka	40-60
22	*Vanellus vanellus*	bibic	-	≤5
23	*Cuculus canorus*	kukukk, kakukk, kakukkmadár	kakukk	≥95
24	*Upupa epops*	huputa, bubosbanka, upkás, hupkas, búbosblanka	büdös huputár, bubosbanka	60-95
25	*Coracias garrulus*	ződbákán, kalakótya, zöldbákány	zöldbákán	5-40
26	*Dendrocopus* spp.	harkály	harkály	60-95
27	*Dryocopus martius*	fekete küllő	-	≤5
28	*Picus viridis*	küllő	-	≤5
29	*Alauda arvensis*	pacsirta	pacsirta	5-40
30	*Galerida cristata*	pityér, barázdabillegető (sic!)	-	5-40
31	*Troglodytes troglodytes*	ökörszem	ökörszem	5-40
32	*Phoenicurus ochruros*	-	rozsdafarkú, vörösbögy (sic!), mákhasogató pintyőke (sic!)	40-60
33	*Turdus merula*	feketerigó, rigó	feketerigó, rigó, szarmadár	60-95
34	*Motacilla alba*	barázdabillegető, brázdabillegető, bráznobillegető	barázdabillegető	5-40
35	*Motacilla flava*	*	-	≤5
36	*Erithacus rubecula*	vörösbögy	vörösbögy	5-40
37	*Parus major, P. caeruleus*	cinege, cinke, kékcinke	cinke	60-95
38	*Parus caeruleus*	-	cinke	≤5
39	*Delichon urbicum*	föcske, fecske	fecske, föcske	5-40
40	*Hirundo rustica*	föcske, fecske	fecske, föcske, füsti fecske	5-40
41	*Riparia riparia*	-	partifecske	≤5
42	*Oriolus oriolus*	sárgarigó	sárgarigó	5-40
43	*Lanius collurio*	szarkagáborján, gáborgyán	-	≤5
44	*Sturnus vulgaris*	seregély	seregély	60-95
45	*Pica pica*	szarka	szarka	≥95
46	*Garrulus glandarius*	szajkó	szajkó	5-40

	scientific name	local name in Slovenia	local name in Hungary	%
47	*Corvus frugilegus*	csóka, feketecsóka	csóka, fekete csóka, vetési varjú	60-95
48	*Corvus cornix*	varjú, kánya	varjú, kánya, vari, dolmányos varjú	≥95
49	*Corvus monedula*	vari, varjú, káska, kavka	-	5-40
50	*Corvus corax*	holló	holló	5-40
51	*Passer domesticus, P. montanus*	veréb	veréb, csuri	≥95
52	*Fringilla coelebs*	pintyőke	-	≤5
53	*Serinus serinus*	-	sármány	≤5
54	*Carduelis chloris*	-	zöldike	≤5
55	*Carduelis carduelis*	-	tiglice	≤5
56	*Coccothraustes coccothraustes*	mákhasogató pintyőke	meggyvágó	≤5
57	*Emberiza calandra*	sördin, sordiny	-	≤5

DISCUSSION

Compared with other regions (Kovács 1987; Gub 1996; Babai 2011; Ulicsni et al. 2016), the number of folk taxa recorded in the examined regions demonstrates the existence of significant, detailed knowledge. The proportion of invertebrate to vertebrate taxa (55% vs. 45%) is also similar to that found in the 1996 study by Gub (48% vs. 52%). Knowledge of some taxa was surprising and difficult to predict, since they had no particularly significant salient features (e.g. the spotted sulfur moth *Emmelia trabealis*; or sailor butterflies [*Neptis* spp.]). In the case of these species, we did not consider cultural salience to be likely either, although historical existence cannot be excluded. There were also similar proportions of species where it was difficult to explain the reason for their being known (Kovács 1987; Gub 1996) (e.g. the harvest mite: *Microtrombidium* spp.; and the two-spotted ladybug: *Adalia bipunctata* etc.). Knowledge of the vast majority of taxa, however, was easy to predict: based on their higher salience values and in keeping with our preliminary expectations, the majority of these taxa were well known in both regions. This is also confirmed by the 100% overlap between the two regions with respect to the list of known mammal taxa.

Due to the greater diversity of the butterfly fauna (Lepidoptera) in the Őrség region compared to the Carpathian Basin, along with the existence of several rare and highly protected species, they are particularly significant from the point of view of conservation, thus they are also of importance in connection with nature conservation management measures, which represent a major source of conflict between farmers and conservationists. Similarly serious conflicts have emerged between local inhabitants and the authorities in relation to mammal species, arising from the opposition between the game husbandry and nature conservation values of these species, and the restrictions on activities that can be carried out by the local population and the losses these entail

(Kozorog 2019). In relation to butterflies, the main sources of conflict are regulations concerning mowing times, which the national park has imposed taking into account the life cycle of the butterflies rather than the quality of the hay, which is the primary consideration among local farmers. In the case of big game animals, the most significant source of conflict – the direct damage caused by the trampling and eating of crops – is not primarily between nature conservationists and the local population, but rather between the local people and the game breeders.

The more ambitious nature conservation activities and the more active involvement of the local population in Hungarian culture clearly explain why, among the Hungarian folk names, there were a far bigger number (although, even so, amounting to a tiny minority) of official names originating from the media and from nature conservation professionals, rather than old folk names. In our experience, based on the origin of the name there is a good chance of being able to deduce the origin of the knowledge connected to it (in the case of taxa referred to by their professional names, knowledge originating from the media or from professional nature conservationists was generally significant). This phenomenon is also common in Göcsej (Bazsika 2010), for example in the case of the European stag beetle (*Lucanus cervus*) and dragonflies (Odonata). Knowledge of certain species that are especially important from a nature conservation point of view (e.g. the Corncrake [*Crex crex*]) is undoubtedly owing to nature conservation communications. The agricultural restrictions imposed due to these species, which were previously unknown to the local population, are responsible for the majority of the conflicts.

Some genuine surprises are occasionally to be found in terms of taxon names. Some of the interviewees consistently referred to the Eurasian beaver (*Castor fiber*) as an otter, due to an old name being passed over to a new species (generally these interviewees were not aware of the Eurasian otter). Another striking example was the Barn Owl (*Tyto alba*) being referred to as a "snowy owl" which was an example of a new name, originating from the media, being passed over to an earlier known species.

The naming of many species clearly also refers to the species' most salient feature. In the case of earwigs (Dermaptera), for example, the reference is to the associated folklore—that is, that the insect makes its home in the human ear. Likewise, in the case of nocturnal moths (*vacsoravesztő*, or "dinner spoilers"), the reference is to their typical behavior—namely, that they are drawn inside by the light in the evening and occasionally fall into the food (cf. Kovács 1987).

In other cases, it is far harder to draw inferences from the name, and certain well-differentiated folk taxa are not even differentiated based on their names. Three folk taxa are simply referred to as "moths" even though they are distinctly separate in terms of their features. This phenomenon is found throughout the world, and occasionally even appears in quite extreme forms: in one Matsés tribe in Peru, only a single local name was used by interviewees for more than 50 species of bat, despite the local people's clear and detailed knowledge of their differences (Fleck et al. 2002).

In addition to the bigger number of potentially knowable species, the list of known invertebrates indicating the most significant difference between the two regions can also be dramatically influenced by a few particularly observant interviewees. On such occasions, knowledge emerges of taxa that are not called by a precise name, but that are precisely observed (e.g. the poppy weevil *Ceutorhynchus macula-alba*; and "snout beetles" – Curculionidae etc.).

CONCLUSION

Despite the typical decline in traditional ecological knowledge in Europe, these recently gathered data indicate that a rich, vibrant knowledge is still to be found among the Hungarian inhabitants who supplied information in the Őrség region and neighboring Slovenian villages. The especially large number of recorded folk taxa, and the accurate knowledge required to differentiate between them, confirm that even today it is worth conducting investigations on this topic in East Central Europe in the interests of gaining knowledge of, and conserving, cultural and natural values. Such knowledge can form a bridge, helping to establish a common language in the context of conflicts between local communities and nature conservationists. Knowledge reveals the interests and preferences of the local community and makes them easier to understand; it explains why communities behave as they do, and the reasons behind the cultural or agricultural prejudices that happen to be linked with certain animal species. Such information can be of enormous help to the nature conservation bodies operating in the area by contributing to the establishment of closer cooperation in a cultural landscape, shaped and maintained through extensive land use, that represents nature conservation and cultural and esthetic values in equal measure. It is for precisely this reason that such knowledge, and the extensive land use that is built on it, can also contribute to the sustainable management of natural values, while the more efficient integration of such knowledge in decision making is an indispensable task for the future.

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