

Terrestrial isopods (Isopoda: Oniscidea) in the Upper Mežica Valley

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Abstract. The distribution of terrestrial isopods in many parts of Slovenia is still poorly documented. This article is a contribution to the knowledge of the terrestrial isopod fauna in the Upper Mežica Valley, which is known for its long mining tradition. Isopods were collected from April to October 2022 by hand from 49 localities in the wider area of two towns – Žerjav and Črna na Koroškem in the area of Podpeca, the area above the Bistra Valley, and in the areas Spodnje Javorje and Javorje. Twelve different taxa of terrestrial isopods were determined, eleven of them to the species level. The most frequently found isopod was *Trachelipus ratzeburgii* as the researched area is mainly forest covered. However, the highest diversity of species was recorded in urban and semiurban areas. *Oniscus asellus* was found in the town Črna na Koroškem, which is probably the second documented location of *O. asellus* in Slovenia.

Key words: fauna, survey, terrestrial isopods, Upper Mežica Valley

Izvleček. Kopenski enakonožci (Isopoda: Oniscidea) zgornje Mežiške doline – Razširjenost posameznih vrst enakonožcev je po številnih predelih Slovenije še vedno slabo raziskana. Ta članek je prispevek k poznavanju favne kopenskih enakonožcev v zgornji Mežiški dolini, ki je znana po dolgoletni rudarski tradiciji. Enakonožce smo nabirali ročno od aprila do oktobra 2022 na 49 lokalitetah na širšem območju dveh mest – Žerjava in Črne na Koroškem, na območju Podpece, območju nad dolino Bistre, ter na območjih Spodnje Javorje in Javorje. Determinirali smo dvanajst taksonomskih skupin enakonožcev, enajst od tega do vrste. Najpogostejše popisana vrsta je bila *Trachelipus ratzeburgii*, saj je raziskovano območje večinoma pokrito z gozdom. Največjo vrstno pestrost enakonožcev pa smo zabeležili v urbanih in suburbanih okoljih. V mestu Črna na Koroškem je bil najden tudi *Oniscus asellus*, kar je verjetno drugo dokumentirano nahajališče *O. asellus* v Sloveniji.

Ključne besede: favna, popis, kopenski enakonožci, zgornja Mežiška dolina



Introduction

The fauna of terrestrial isopods in Slovenia consists of 74 species (Vittori et al. 2023) – two new species have been documented only recently (Vittori 2022; Vittori et al. 2023). Terrestrial isopods in Slovenia have been extensively documented initially by Potočnik (1979, 1980, 1981, 1984, 1992, 1993). In his publications, Potočnik documented species from different locations from the wider area of Slovenia (Potočnik 1979, 1980), including the Triglav National Park (Potočnik 1981), the Slovenian coast of the Adriatic Sea (Potočnik 1984), and the Karst Edge (Potočnik 1990). Most of the isopod data from Slovenia is not based on systematic research, but rather on coincidental findings (Potočnik 1979). For a better understanding of isopod distribution in Slovenia, systematic research of isopod fauna is especially needed in the Northern and Western parts of Slovenia (Potočnik 1990). Potočnik's work relied on existing isopod literature (especially the works by Karaman (1966)), museum collections, his own field work and samples collected from other researchers (Potočnik 1979, 1993). However, publications by Potočnik and other older literature do not provide a good figure of the distribution of different isopod species in Slovenia. Specifically, these publications indicate mostly locations of new species for Slovenia and do not provide an overview of all present species by region, nor species abundancy. Recently, the terrestrial isopod fauna has been investigated intensively in the Slovenian Karst (Vilisics & Lapanje 2005) and the Boč Massif area (Ravnjak & Kos 2014), but most regions of Slovenia remain quite poorly surveyed. One of those areas is also the Upper Mežica Valley, which is known for its heterogeneous geomorphological features and its long history of mining tradition, which resulted in extensive environmental pollution (Mioč 1975; Šajn 2002; Polšak 2011). The habitat diversity of the Mežica Valley and its surroundings as well as its long-term pollution with heavy metals make this area interesting also from the point of view of the terrestrial isopod fauna research, which was the purpose of this study.

Materials and methods

Geographical, geological and climatic characteristics of the region

The Upper Mežica valley lies in the Carinthia region, in the northern part of Slovenia. The area represents a juncture between the Eastern Alps, the Southern Kamnik–Savinja Alps and the Southern Karavanke mountain chain. The area, which is characterised by steep and mountainous terrain (Čas 1996; Perko 1998), is composed of silicate rocks (cca. 80%), such as andesite, dacite, tonalite, granite and gneiss, and carbonate rocks (cca. 20%) – mainly limestone and dolomite. It is also characterised by a variety of different forest communities, the most prevalent being Homogyno – Fagetum, Cardamini Savesni Fagetum and Blechno – Fagetum (ZGS 2022). Because of human interference and a long history of mining, the natural forest communities have undergone a series of drastic changes. The degradation of the vegetation coverage is therefore visible to this day (Polšak 2011).

The area is characterised by mountainous climate, with 1,000-2,300 mm rainfall per year (ARSO 2024a). The average temperatures in the warmest month of the year exceed 10°C and are below -3°C in the coldest months of the year (ARSO 2024b). The snow cover persists for 50 to 125 days per year (ARSO 2024a). The vegetation period is four to six months long (Čas & Adamič 1998).

Parts of the researched area are registered as valuable natural features (Podpeca – habitat of petrophilic and thermophilic butterfly species, Bistra – rock and mineral depository) and NATURA 2000 areas (Žerjav – Dolina smrti, Obistove skale, Cvelbar) (OJ EC 1992; Ur. l. RS 2004a; Ur. l. RS 2004b). A great part of the forest is protected on the national level (ARSO 2023).

Field work and determinations

Isopods, which were collected by hand from April to October 2022 at 49 localities inside the Upper Mežica Valley (Fig. 1), occurred in the area of the two small towns – Žerjav (localities 11–18; Tab. 2) and Črna na Koroškem (localities 19–23, Tab. 2), on the ridge between Žerjav and Črna (locality 27, Tab. 2), in the area of Podpeca (localities 28–40; Tab. 2), above the Bistra Valley (localities 1–5; Tab. 2), in the area Spodnje Javorje (localities 6–10 and 24–25; Tab. 2), and in the area of Javorje (localities 41–49; Tab. 2).

Sampling on some localities was repeated twice owing to low number of individuals found. The aim was to cover the researched area as evenly as possible. Isopods were collected from underneath bark, rocks, wood planks, moss and other objects found on the individual locality. At every locality, the coordinates (WGS84), altitude, habitats and microhabitats were recorded. Localities inside human settlements were characterized as urban, in the immediate vicinity of settlements as semi-urban, and other localities as non-urban.

Collected isopods were preserved in 70% ethanol and sorted by species using different identification keys (Hopkin 1991; Lapanje & Schmalzfuss, unpublished). All species were determined by the authors (P. Š. and P. Z.), except for *Calconiscellus karawankianus* and *Tachysoniscus austriacus*, which was identified by Miloš Vittori (Department of Biology, Biotechnical Faculty, University of Ljubljana).

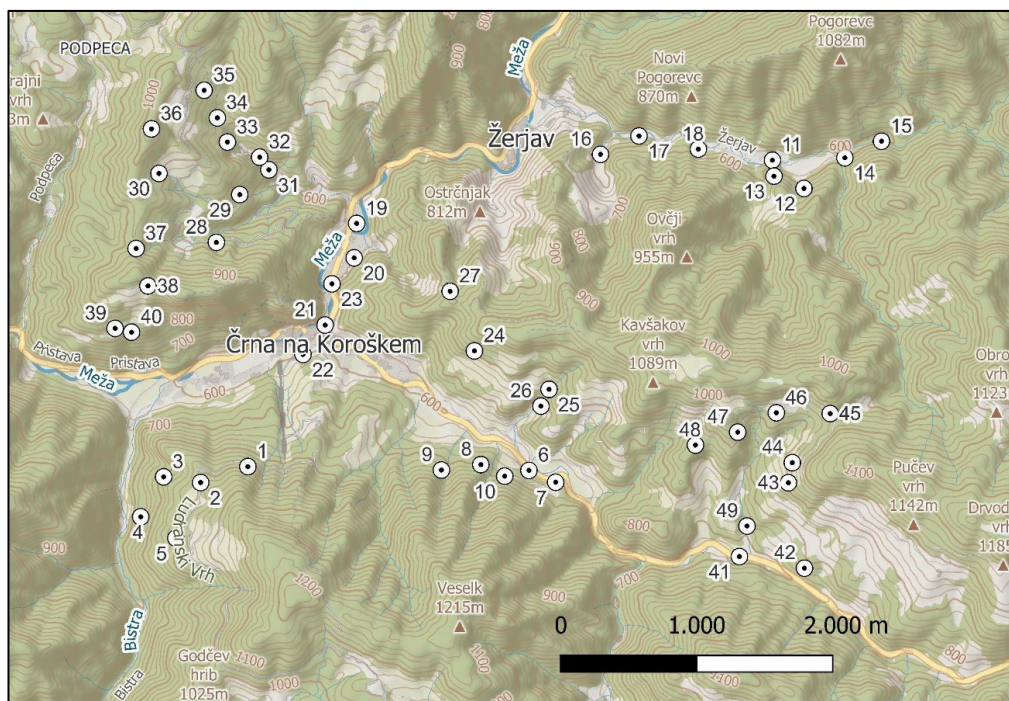


Figure 1. Map of the researched area (part of the Upper Mežica Valley; Žerjav and Črna na Koroškem) with marked localities. Number of localities refer to Tab. 2.

Slika 1. Zemljevid raziskovanega območja (del zgornje Mežiške doline; Žerjav in Črna na Koroškem) z označenimi lokalitetami. Številke lokalitet se nanašajo na Tab. 2.

Results and discussion

At the 49 surveyed localities, a total of 1,035 specimens of terrestrial isopods were collected, most of them underneath bark, rocks, and wood planks (Tab. 2). Twelve different taxa of terrestrial isopods were determined, eleven of them to the species level (Tabs. 1,2). That represents roughly 16% of all terrestrial isopod species found in Slovenia. All determined species had been previously recorded in Slovenia (Potočnik 1979, 1980, 1981, 1984, 1992, 1993; Vittori et al. 2023). The collected isopods belong to eight isopod families (Tab. 1). Parts of the researched area were impassable by foot, so a few sections of the area remain unsearched.

Table 1. List of isopod species found from April to October 2022 in the Upper Mežica Valley. The locality IDs are indicated by numbers from 1 to 49 as described in Tab. 2.

Tabela 1. Seznam vrst enakonožcev, nabranih od aprila do oktobra 2022 na območju zgornje Mežiške doline. Lokalitete so označene s števili od 1 do 49, kot opisano v Tab. 2.

Family/Species	Locality
Agaridae	
<i>Protracheoniscus politus</i> (Koch, 1841)	28, 31, 38
Armadillidiidae	
<i>Armadillidium versicolor</i> Stein, 1859	6, 17, 21, 22, 23, 25, 41
<i>Armadillidium vulgare</i> (Latreille, 1804)	19, 20
Cylistidae	
<i>Cylisticus convexus</i> (De Geer, 1778)	17, 19, 28
Ligiidae	
<i>Ligidium hypnorum</i> (Cuvier, 1792)	25, 28, 32, 49
Oniscidae	
<i>Oniscus asellus</i> Linnaeus, 1758	21
Porcellionidae	
<i>Porcellio scaber</i> Latreille, 1804	19, 21, 41
<i>Porcellio spinicornis</i> Say, 1818	6, 19, 21, 22
Trachelipodidae	
<i>Trachelipus ratzeburgii</i> (Brandt, 1833)	all except 21, 23, 41
Trichoniscidae	
<i>Calconiscellus karawankianus</i> (Verhoef, 1908)	12, 14, 15
<i>Hyloniscus</i> sp.	18, 22
<i>Tachyoniscus austriacus</i> (Verhoeff, 1908)	31

The majority of specimens were collected in the forest or on the forest edge, near dirt roads, forest trails, meadows, and streams. The researched area is mainly forest covered, which suits the forest specialist *Trachelipus ratzeburgii*. The species constitutes a great majority of all collected specimens and was found on all researched localities, except for three of them (Tab. 1). *T. ratzeburgii* is commonly found in humid forest in Central and Southeast Europe (Radu 1985; Tomescu et al. 2015). The species *Ligidium hypnorum*, *Calconiscellus karawankianus* and *Protracheoniscus politus* were found exclusively in wooded areas. *L. hypnorum* is distributed throughout Europe and West Asia. The species prefers humid deciduous forests, swamps, and banks (Friedrich 2004). *Protracheoniscus politus* was found only on three localities, although it has been frequently found in other regional studies of isopod fauna in Slovenia (Potočnik 1979, 1989, 1990; Vilisich & Lapanje 2005; Ravnjak & Kos 2014). The species *Armadillidium versicolor* was registered on 14% of all sampling sites, mostly those near a river or stream. The species is distributed in Eastern Europe, predominantly near rivers and lakeshores (Schmalfuss 2002; Csonka et al. 2013). The rest of the collected isopod species were found on less than 10% of all sampling sites.

The highest biodiversity of terrestrial isopods was ascertained in urban and semi-urban localities of Črna na Koroškem (Tab. 2). There we also found *Porcellio scaber*, *P. spinicornis*, *Cylisticus convexus* and *A. vulgare*, which are to be expected given by their synanthropic nature (Schmalfuss 2002; Magura et al. 2008; Holland 2014; Boeraeve et al. 2021). *P. spinicornis* is rarely found in Slovenia, but more often in the urban environment in neighbouring Austria (GBIF 2024). At a construction site in the centre of Črna na Koroškem (location 21; Tab. 2) we also

found one specimen of *Oniscus asellus*. *O. asellus* is mostly distributed in Northern and Western Europe, where it is frequently found in woodlands, but is common also in the human settlement areas like gardens. *O. asellus* often occurs sympatrically with *P. scaber* (Beyer 1964), which is a common synanthropic species in Slovenia, while the distribution of *O. asellus* in Slovenia is poorly recorded. Črna na Koroškem is probably the second documented location of *O. asellus* in Slovenia besides Ljubljana (Potočnik 1980). The town is located in the narrow valley of the river Meža and its tributaries, so an urban environment with parks and gardens is surrounded by steep slopes covered with forest. In such an environment, native forest and synanthropic species can be found, together with occasional introduced species, as most probably is the case of *O. asellus*. Earlier it was reported that urban environment might offer a great diversity of habitats, which also results in a greater species diversity of isopods (Vilisics et al. 2005; Vilisics & Hornung 2009).

Table 2. List of localities with corresponding coordinates, altitude (Alt, in metres), sampling date, habitat description and list of collected isopod taxa. The estimated number of isopods on the location is presented as N. Classif. refers to classification: U – urban, SU – semi-urban, NU – non-urban environment.

Tabela 2. Seznam lokalitet z opisom koordinat, nadmorsko višino (Alt, v metrih), datumom vzorčenja, opisom habitata in seznamom enakonožcev, nabranih na posamezni lokaliteti. Ocena številčnosti enakonožcev na lokaciji je podana kot N. Classif se nanaša na klasifikacija lokalitet: U – urbano, SU – delno-urbano, NU – neurbano okolje.

ID	Name	Lat, Lon (WGS84)	Alt (m)	Sampling date	Classif.	Habitat	Species (N)
1	N slope of Ludranski Vrh; SW of Črna na Koroškem	46.461525, 14.842983	878	15. 5. 2022	NU	forest edge (dirt road); underneath bark	<i>T. ratzeburgii</i> (> 20)
2	NW slope of Ludranski Vrh, above the Bistra Valley; SW of Črna na Koroškem	46.460462, 14.838461	886	15. 5. 2022	NU	forest edge (meadow, dirt road); underneath rocks	<i>T. ratzeburgii</i> (> 20)
3	W slope of Ludranski Vrh, above the Bistra Valley; SW of Črna na Koroškem	46.460834, 14.834918	788	15. 5. 2022	NU	forest (forest trail); underneath bark	<i>T. ratzeburgii</i> (> 20)
4	W slope of Ludranski Vrh, above the Bistra Valley; SW of Črna na Koroškem	46.458186, 14.832730	720	15. 5. 2022	NU	forest (forest trail); underneath rocks	<i>T. ratzeburgii</i> (7)
5	NW slope of Ludranski Vrh, above the Bistra Valley; SW of Črna na Koroškem	46.456786, 14.836105	906	15. 5. 2022	NU	forest (forest trail); underneath bark	<i>T. ratzeburgii</i> (> 50)
6	Forest edge near Spodnje Javorje, 50 m SW of Javorski potok; SE of Črna na Koroškem	46.461304, 14.869906	642	17. 4. 2022, 19. 9. 2022	SU	unpaved parking lot of wood production (near road, stream); underneath rocks, bark;	<i>T. ratzeburgii</i> (3) <i>A. versicolor</i> (7) <i>P. spinicornis</i> (4)
7	Forest near Spodnje Javorje, 100 m S of Javorski potok; SE of Črna na Koroškem	46.460525, 14.872465	647	17. 4. 2022	NU	forest edge (meadow, dirt road); underneath bark	<i>T. ratzeburgii</i> (8)
8	Forest near Spodnje Javorje; SE of Črna na Koroškem	46.461684, 14.865292	696	17. 4. 2022	NU	forest edge (dirt road); underneath rocks	<i>T. ratzeburgii</i> (8)

ID	Name	Lat, Lon (WGS84)	Alt (m)	Sampling date	Classif.	Habitat	Species (N)
9	Forest near Spodnje Javorje; SE of Črna na Koroškem	46.461319, 14.861521	733	17. 4. 2022	NU	forest edge (dirt road); underneath rocks	<i>T. ratzeburgii</i> (9)
10	Forest near Spodnje Javorje; SE of Črna na Koroškem	46.460923, 14.867582	682	17. 4. 2022	NU	forest edge (forest trail, near farm); underneath rocks, bark	<i>T. ratzeburgii</i> (9)
11	Forest edge, 100 m S of Jazbinski potok; E of Žerjav	46.481821, 14.893181	576	24. 4. 2022	SU	unpaved parking lot (forest edge); underneath rocks, wood planks	<i>T. ratzeburgii</i> (2)
12	Forest; E of Žerjav	46.479957, 14.896205	628	24. 4. 2022, 19. 9. 2022	NU	forest (forest trail); underneath rocks, bark	<i>T. ratzeburgii</i> (> 20) <i>C. karawankianus</i> (4)
13	Forest; E of Žerjav	46.480770, 14.893331	617	24. 4. 2022	NU	forest edge (dirt road); underneath rocks	<i>T. ratzeburgii</i> (> 20)
14	Forest edge near stream; E of Žerjav	46.481990, 14.900120	579	24. 4. 2022	NU	dirt road (near stream); underneath wood planks, rocks	<i>T. ratzeburgii</i> (> 20) <i>C. karawankianus</i> (4)
15	Forest edge, 100 m S of Jazbinski potok; E of Žerjav	46.483088, 14.903630	648	24. 4. 2022, 19. 9. 2022	NU	forest edge (near road); underneath bark, wood planks	<i>T. ratzeburgii</i> (> 20) <i>C. karawankianus</i> (4)
16	Forest near sandpit; SE of Žerjav	46.482193, 14.876708	576	7. 5. 2022	NU	woodshed, garage (forest edge, near dirt road, near quarry); underneath wood planks	<i>T. ratzeburgii</i> (> 20)
17	Forest edge, 50 m S of Jazbinski potok; E of Žerjav	46.483411, 14.880392	553	7. 5. 2022, 19. 9. 2022	SU	woodshed (forest edge, near road); underneath rocks, bark, wood planks	<i>T. ratzeburgii</i> (> 20) <i>A. versicolor</i> (1) <i>C. convexus</i> (1)
18	Forest edge near sandpit, 20 m S of Jazbinski potok; E of Žerjav	46.482547, 14.886083	574	7. 5. 2022	NU	closed sandpit (forest edge); underneath rocks, bark	<i>T. ratzeburgii</i> (> 20) <i>Hyloniscus sp.</i> (1)
19	Unpaved parking lot, 100 m W of Meža river; Črna na Koroškem	46.477603, 14.853358	552	7. 5. 2022, 19. 9. 2022	U	unpaved parking lot; underneath rocks, wood planks	<i>T. ratzeburgii</i> (2) <i>A. vulgare</i> (> 10) <i>C. convexus</i> (6) <i>P. scaber</i> (> 20) <i>P. spinicornis</i> (> 10)
20	Meadow near house; Črna na Koroškem	46.475327, 14.853126	572	7. 5. 2022	U	town (meadow); compost	<i>T. ratzeburgii</i> (> 50) <i>A. vulgare</i> (2)

ID	Name	Lat, Lon (WGS84)	Alt (m)	Sampling date	Classif.	Habitat	Species (N)
21	Construction site in town center, near Meža river; Črna na Koroškem	46.470882, 14.850357	577	7. 5. 2022	U	construction site (behind abandoned building); underneath wood planks	<i>A. versicolor</i> (7) <i>O. asellus</i> (1) <i>P. scaber</i> (7) <i>P. spinicornis</i> (2)
22	Forest edge near cemetery; Črna na Koroškem	46.468941, 14.848243	600	7. 5. 2022, 1. 10. 2022	U	graveyard (stone wall, forest edge); underneath barrel, bark, roof tile	<i>T. ratzeburgii</i> (6) <i>A. versicolor</i> (3) <i>Hyloniscus sp.</i> (2) <i>P. spinicornis</i> (2)
23	Walkway in town center; Črna na Koroškem	46.473609, 14.851005	577	8. 5. 2022	U	walkway (near road in town centre); on pavement	<i>A. versicolor</i> (1)
24	Forest near Spodnje Javorje; E of Črna na Koroškem	46.469193, 14.864661	864	8. 5. 2022	NU	forest (dirt road); underneath bark	<i>T. ratzeburgii</i> (> 20)
25	Forest edge, S of Matvoz climbing area; E of Črna na Koroškem	46.466664, 14.871815	735	8. 5. 2022	NU	forest edge (near road, meadow); underneath bark	<i>T. ratzeburgii</i> (> 50) <i>A. versicolor</i> (1) <i>L. hypnorum</i> (1)
26	Forest near Spodnje Javorje; E of Črna na Koroškem	46.465554, 14.871039	743	8. 5. 2022	NU	forest edge (near road); underneath bark	<i>T. ratzeburgii</i> (6)
27	Ridge S of Žerjav; NE of Črna na Koroškem	46.473128, 14.862325	829	8. 5. 2022	NU	forest (forest trail); underneath bark	<i>T. ratzeburgii</i> (> 50)
28	E slope of Podpeca; NW of Črna na Koroškem	46.476332, 14.839922	779	13. 4. 2022, 1. 10. 2022	NU	forest edge (dirt road); underneath rocks, moss	<i>T. ratzeburgii</i> (> 20) <i>C. convexus</i> (1) <i>L. hypnorum</i> (4) <i>P. politus</i> (1)
29	E slope of Podpeca; NW of Črna na Koroškem	46.479492, 14.842151	741	13. 4. 2022	NU	dirt road - underneath bark	<i>T. ratzeburgii</i> (9)
30	Ridge of Podpeca; NW of Črna na Koroškem	46.480880, 14.834410	905	1. 10. 2022	NU	wood pile (forest edge, dirt road, near farm); underneath bark	<i>T. ratzeburgii</i> (> 50)
31	E slope of Podpeca, near stream; NW of Črna na Koroškem	46.481133, 14.844944	651	13. 4. 2022, 1. 10. 2022	NU	farm (forest edge, near stream); underneath rocks, wood planks, bark	<i>T. ratzeburgii</i> (6) <i>P. politus</i> (1) <i>T. austriacus</i> (2)
32	E slope of Podpeca; NW of Črna na Koroškem	46.481966, 14.844057	697	13. 4. 2022, 1. 10. 2022	NU	forest (forest trail); underneath bark, on surface	<i>T. ratzeburgii</i> (> 10) <i>L. hypnorum</i> (1)
33	E slope of Podpeca; NW of Črna na Koroškem	46.482961, 14.840962	779	22. 5. 2022	NU	forest (forest trail); underneath bark	<i>T. ratzeburgii</i> (> 20)
34	E slope of Podpeca; NW of Črna na Koroškem	46.484555, 14.839993	823	22. 5. 2022	NU	forest (forest trail); underneath bark	<i>T. ratzeburgii</i> (> 100)
35	E slope of Podpeca; NW of Črna na Koroškem	46.486380, 14.838720	905	22. 5. 2022	NU	forest (forest trail); underneath bark	<i>T. ratzeburgii</i> (> 20)
36	Ridge of Podpeca; NW of Črna na Koroškem	46.483818, 14.833683	1010	22. 5. 2022	NU	forest (forest trail); underneath bark	<i>T. ratzeburgii</i> (> 20)

ID	Name	Lat, Lon (WGS84)	Alt (m)	Sampling date	Classif.	Habitat	Species (N)
37	Ridge of Podpeca; W of Črna na Koroškem	46.475915, 14.832233	908	22. 5. 2022	NU	forest edge (dirt road); underneath bark	<i>T. ratzeburgii</i> (6)
38	Ridge of Podpeca, W of zipline; W of Črna na Koroškem	46.473446, 14.833379	949	22. 5. 2022	NU	wood pile (forest edge, meadow, dirt road); underneath bark, branches	<i>T. ratzeburgii</i> (> 20) <i>P. politus</i> (1)
39	S slope of Podpeca; W of Črna na Koroškem	46.470634, 14.830239	780	22. 5. 2022	NU	forest edge (meadow, dirt road); underneath rocks, wood planks	<i>T. ratzeburgii</i> (5)
40	S slope of Podpeca; W of Črna na Koroškem	46.470384, 14.831814	796	22. 5. 2022, 1. 10. 2022	NU	forest (forest trail); underneath bark	<i>T. ratzeburgii</i> (> 20)
41	Parking lot in Javorje; SE of Črna na Koroškem	46.455636, 14.890071	690	18. 6. 2022	SU	unpaved parking lot (near wood production); underneath bark, wood planks, rocks	<i>P. scaber</i> (> 10) <i>A. versicolor</i> (7)
42	Forest near Javorje; SE of Črna na Koroškem	46.454873, 14.896300	738	18. 6. 2022	NU	forest edge (dirt road); underneath rocks, bark	<i>T. ratzeburgii</i> (> 20)
43	Forest near Javorje; E of Črna na Koroškem	46.460514, 14.894749	883	18. 6. 2022	NU	forest edge (meadow); underneath bark	<i>T. ratzeburgii</i> (8)
44	Forest near Javorje; E of Črna na Koroškem	46.461841, 14.895125	909	18. 6. 2022	NU	forest edge (meadow, dirt road); underneath bark	<i>T. ratzeburgii</i> (> 50)
45	Meadow near Javorje; E of Črna na Koroškem	46.465089, 14.898751	951	18. 6. 2022	NU	forest edge (meadow, dirt road); underneath wood planks, branches	<i>T. ratzeburgii</i> (> 20)
46	Forest edge near Javorje; E of Črna na Koroškem	46.465136, 14.893590	937	18. 6. 2022	NU	forest edge (meadow, dirt road); underneath wood planks, rocks	<i>T. ratzeburgii</i> (> 20)
47	Forest near Javorje; E of Črna na Koroškem	46.463854, 14.889891	912	18. 6. 2022	NU	forest edge (dirt road); underneath rocks, bark, branches	<i>T. ratzeburgii</i> (> 50)
48	Forest near Javorje; E of Črna na Koroškem	46.462997, 14.885844	865	18. 6. 2022	NU	wood production disposal area (forest edge, dirt road); underneath wood planks, branches, bark	<i>T. ratzeburgii</i> (> 50)
49	Forest edge by stream, near Javorje; SE of Črna na Koroškem	46.457653, 14.890792	700	18. 6. 2022	NU	edge of dirt road (forest edge, near stream); underneath rocks, bark	<i>T. ratzeburgii</i> (8) <i>L. hypnorum</i> (1)

Povzetek

Favna enakonožcev je kljub izčrpnim raziskavam Potočnika (1979, 1980, 1981, 1984, 1992, 1993) in drugih raziskovalcev (Vilšič & Lapanje 2005; Ravnjak & Kos 2014; Vittori 2022; Vittori et al. 2023) na številnih delih Slovenije še vedno slabo raziskana. Zgornja Mežiška dolina spada med manj raziskana območja, kar se tiče favne enakonožcev, čeprav je območje zaradi velike habitatne pestrosti ter dolgotrajne onesnaženosti s težkimi kovinami izredno zanimivo za raziskave. Med aprilom in oktobrom 2022 smo zato napravili popis enakonožcev na območju zgornje Mežiške doline. Enakonožce smo nabrali ročno na 49 lokacijah na območju dveh večjih krajev Žerjava (lokalitete 11–18) in Črne na Koroškem (lokalitete 19–23), na slemenu med Žerjavom in Črno (lokaliteta 27), na območju Podpece (lokalitete 28–40), nad dolino Bistre (lokalitete 1–5), na območju Spodnjega Javorja (lokalitete 6–10 in 24–25) in na območju Javorja (lokalitete 41–49). Skupno smo determinirali 12 taksonomskih skupin enakonožcev, enajst od tega do vrste. Najpogostejše popisana je bila vrsta *T. ratzeburgii*, ki smo jo zabeležili skoraj na vseh lokalitetah. Velik del območja namreč prekriva gozd, kar je razlog, da je vrsta, specializirana za gozdno okolje, splošno razširjena po celotnem raziskovanem območju. Med pogosto popisanimi je bila tudi vrsta *A. versicolor*, ki smo jo zabeležili na 14 % vseh lokalitet. Največjo vrstno pestrost smo zabeležili na urbanih oz. suburbanih lokalitetah na območju Črne na Koroškem, kjer smo našli sinantropne vrste *P. scaber*, *P. spinicornis*, *Cylisticus convexus* and *A. vulgare*. Posebej zanimiva je najdba *O. asellus* v središču Črne na Koroškem, saj gre za drugo zabeleženo najdbo te vrste v Sloveniji (Potočnik 1980).

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