

The findings of *Cepaea nemoralis* (Linnaeus, 1758) in the Oreophyticum of the Krušné Hory Mts. (Western Czech Republic)

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Cepaea nemoralis was found in four settlements in the Krušné Hory Mts. in altitudes between 685 and 900 m a.s.l. Two of these records represent the highest known locations of the species in the Czech Republic; so far the species has not been found above 730 m a.s.l.

Key words: Gastropoda, new records, high altitudes

Introduction

Cepaea nemoralis (Linnaeus, 1758) is an Atlantic snail species, formerly known from the northern parts of the Czech Republic with only few localities in the other regions (HONĚK 1995a, b). Several years later, the species was considered to be spreading and was known from various parts of the Czech Republic (DVOŘÁK & HONĚK 2004, PELTANOVÁ et al. 2012). All records originated from low and medium altitudes; there were no records higher than 730 m a.s.l. as published already by HONĚK (1995a, b). During the family vacancies in the Krušné Hory Mts., *C. nemoralis* was accidentally discovered in unusually high altitudes. The results of the searching in several villages in the region are summarised.

Material and methods

Snail survey was done at suitable ruderal stands, mostly near houses. The material was identified by the author and the collected specimens are deposited in his private collection.

Results

Cepaea nemoralis was found in five out of eight surveyed villages, abundant populations were discovered at two sites (site no. 1, 2), while only 1–2 specimens were found at the other sites (site no. 3–5). Except single record in ruderalised bushes by the stream on the periphery of the Nové Hamry village, all stands were typical urban or sub-urban habitats.

The localities are listed according to the order as they were searched. The localization is arranged as follows: settlement, code of the mapping grid according to PRUNER & MÍKA (1996), habitat, geographical coordinates in WGS-84, altitude (m a.s.l.), date of collecting, population status.

- (1) Horní Blatná (5642), in town between 50°23'23.7"N, 12°46'17.6"E and 50°23'33.5"N, 12°46'8.687"E, 890–900 m, July 13–14th 2019, ca. 150 live specimens (Fig. 1).
- (2) Potůčky (5542), by swimming pool, 50°25'40.4"N, 12°44'17.2"E, 700 m, July 14th 2019, two live specimens; Potůčky (5542), by garage near infocentre, 50°25'40.9"N, 12°44'10.9"E, 700 m, July 14th 2019, one live specimen; Potůčky (5542), by parking place near church, 50°25'38.8"N, 12°44'1.4"E, 710 m, July 14th 2019, ca. 30 live specimens.
- (3) Pernink (5642), bushes in the centre of the village, 50°21'57.8"N, 12°46'59.5"E, 835 m, July 15th 2019, one live specimen, several empty shells.
- (4) Abertamy (5642), by house No. 472, 50°22'12.3"N, 12°48'59.1"E, 900 m, July 16th 2019, one live specimen, one empty shell.
- (5) Nové Hamry (5642), ruderalised bushes by Rolava stream, 50°21'27.9"N, 12°43'1.4"E, 685 m, July 17th 2019, one live specimen, five empty shells.

The species occurrence was not confirmed in the centre of Přebuz, seven isolated houses in Ryžovna and several examined places in Hřebečná (Fig. 2).



Fig. 1. *Cepaea nemoralis* from Horní Blatná. Photo by Kateřina Dvořáková.

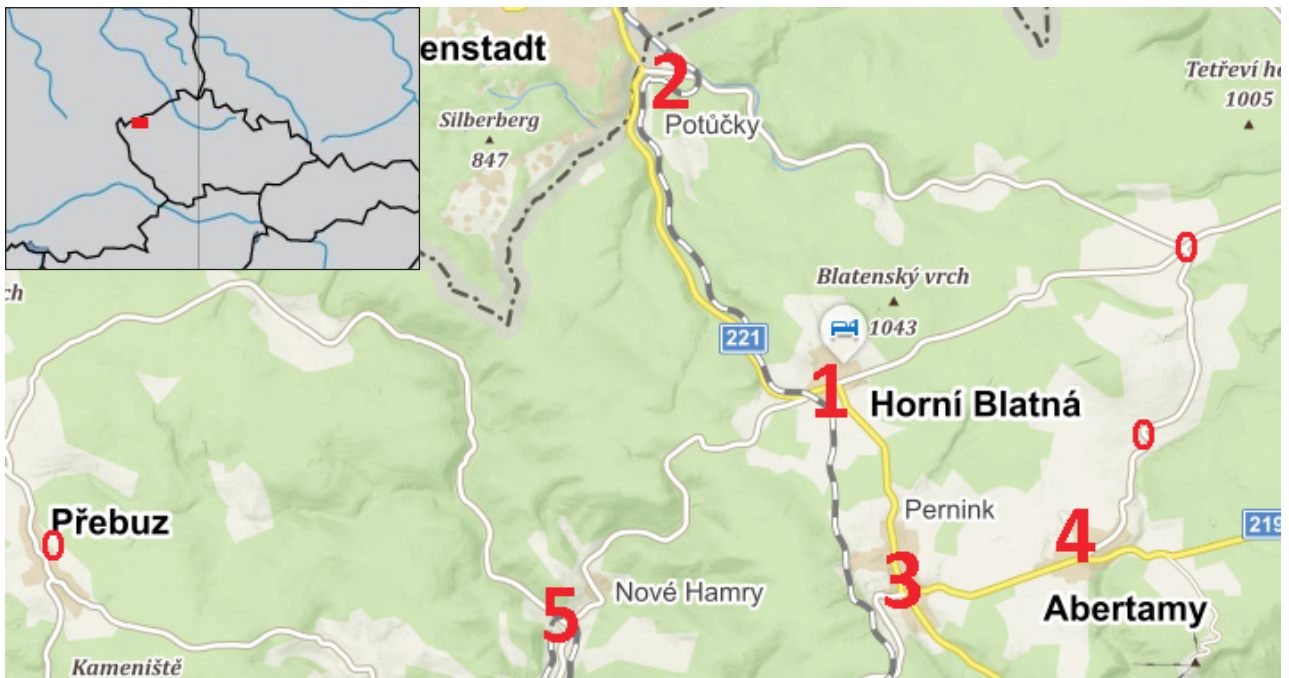


Fig. 2. The present known distribution of *Cepaea nemoralis* in the Krušné hory Mts. 1 – Horní Blatná, 2 – Potůčky, 3 – Pernink, 4 – Abertamy, 5 – Nové Hamry, 0 – negative survey in Přebuz, Ryžovna, and Hřebečná. Background map: MAPY.CZ, © Seznam.cz, a.s., © OpenStreetMap.

Discussion

The previously highest known occurrence of *C. nemoralis* in the Czech Republic was known from Pavlův Studenec at 730 m a.s.l. (HONĚK 1995a, b; DVOŘÁK & HONĚK 2004). New records from the Krušné hory Mts., most of them from Pernink (835 m), Horní Blatná (890–900 m), and Abertamy (900 m) moved up the distribution limit of *C. nemoralis* in this country 170 m higher, indicating it can regularly lives also in the Oreophyticum (i.e. mountain part of the country).

References

DVOŘÁK L. & HONĚK A., 2004: The spread of the Brown Lipped Snail, *Cepaea nemoralis* (Linnaeus, 1758), in the Czech Republic. – Časopis Národního muzea, Řada přírodovědná,

173(1–4): 97–103.

HONĚK A., 1995a: Geographic distribution and shell colour and banding polymorphism in marginal population in *Cepaea nemoralis* (Gastropoda: Helicidae). – Malacologia, 37(1): 111–122.

HONĚK A., 1995b: Distribution and shell colour and banding polymorphism of the *Cepaea* species (Gastropoda: Helicidae) in Bohemia. – Acta Societatis Zoologicae Bohemiae, 59: 63–77.

PELTANOVÁ A., DVOŘÁK L. & JUŘIČKOVÁ L., 2012: The spread of non-native *Cepaea nemoralis* and *Monacha cartusiana* (Gastropoda: Pulmonata) in the Czech Republic with comments on other land snail immigrants. – Biologia, 67(2): 384–389.

PRUNER L. & MÍKA P., 1996: Seznam obcí a jejich částí v České republice s čísly mapových polí pro síťové mapování fauny [List of settlements in the Czech Republic with associated map field codes for faunistic grid mapping system]. – Klapalekiana, 32(Suppl.): 1–115.