

SHORT COMMUNICATIONS

724 An interesting record of *Notonecta reuteri* HUNGERFORD, 1928 (Hemiptera: Heteroptera: Notonectidae) in middle-eastern Poland

KEY WORDS: *Notonecta reuteri*, Poland, distribution, habitat, eutrophic waters, *Ixobrychus minutus*, regurgitations.

Notonecta reuteri HUNGERFORD, 1928 is a water bug rarely encountered in Poland, occurring locally. It inhabits mainly northern and northwestern regions of the country, as well as some massifs in the south. It is a turfophile, and in some countries situated in the south off Poland – for example in the Czech Republic, at the south border of the area – it is considered as a species living in bogs and a glacial relict.

We found the hitherto unknown locality of the species while conducting research on the food of the little bittern (*Ixobrychus minutus* LINNAEUS, 1766) (Aves: Ardeidae)). The remains of a female *N. reuteri* were found in regurgitations cast up by a hatchling from a nest located at the Parkowa pond in the village Samokłęski (the South Podlasiian Lowland , 51°26'39" N, 22°25'45" E, UTM: EC90) collected on 5th July 2014. It is a nursery pond covering the area of apx. 1,2 ha, situated within a huge complex of carp ponds (the overall area: apx. 185 ha), used moderately intensively.

The new locality of *N. reuteri* is interesting. In the last 25 years at the Polish Lowland, it was recorded only from the mires of the Masurian Lakeland KURZAŃKOWSKA 1993: Acta hydrobiol. **35**: 41-48; CZACHOROWSKI, KURZAŃKOWSKA 1995: Przegl. Przyr. **6**: 53-60; KURZAŃKOWSKA 2006: Wiad. entomol. **25**, Supl. 2: 117-120). When compared with older data (WRÓBLEWSKI 1980: Fauna słodkow. Polski, **8**: 1-157), it is a regression in terms of the disposition of habitats and a spectrum of occupied habitats. In the central part of the country, *N. reuteri* was collected only from the Łęczna-Włodawa Lake District (the Western Polesie), neighbouring with the South Podlasiian Lowland, in three eurytopic lakes, as well as in a eurytopic hollow reservoir called "Szczecin" (PŁASKA 2002: Annals Univ. M. Curie-Skłodowska, sec. C, **57**: 1-8; PŁASKA 2009: Teka Kom. Ochr. Kszt. Środ. Przyr. – OL PAN **6**: 228-234). The new data refer to these localities, whereas the central Lubelskie Region turns out the only area, except North Poland, where *N. reuteri* is reported quite regularly. What is more interesting: with an exception of mire waters. Of course – the Łęczno-Włodawa Lake District is rife with low mires and sphagnum bogs, which are situated in the watershed of larger water bodies, which impacts their fauna directly (through the development of habitat

conditions) and indirectly (through migration); the occurrence of turfophiles in eurytopic waters is here a frequent phenomenon.

As for the eurytopic Parkowa pond, it is located at the edge of the Kozłowieckie Forests, where a certain number of mires are preserved, and it is difficult to rule out that the specimen of *N. reuteri* reported by us did not fly from one of them. Also, the parents of the little bittern, to which the studied regurgitations belonged, might have possibly hunted outside the ponds. According to our observations, however, it is very unlikely that they might have sought food at midforest mires located 6–10 km away. Therefore, especially for 5 known localities at eurytopic water bodies in the Lubelszczyzna Region, it can be assumed with high probability that *N. reuteri* occurred indigenously at least in part of them.

The above data demonstrate also that *N. reuteri* is an endangered species in Poland, or at least a part of the Lubelszczyzna Region is its essential refuge. Unfortunately, water bugs were not included in subsequent editions of the Red List of Endangered Animals in Poland. It remains to hope that this uncondusive situation will change, and that the assessment of their dangers will result in their being taken into consideration in nature conservation politics.

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725 A new record of *Leptinus testaceus* MÜLLER, 1817 (Coleoptera: Leiodidae: Platypsyllinae)

KEY WORDS: Coleoptera, Leiodidae, Platypsyllinae, *Leptinus testaceus*, *Glis glis*, Roztocze National Park, new record, E Poland.

Leptinus testaceus is a small, blind beetle, which is one of only two representatives of the subfamily Platypsyllinae (Leiodidae) occurring in Poland. The species belonging to this subfamily are related with mammals, and part of them is considered as external parasites of this group of vertebrates (PECK 2006: *Insecta Mundi*, **20** (1-2): 85-94). In Poland, the species is reported occasionally and individually, which is probably due to its hidden way of life in burrows and nests belonging to mammals. In Poland, *Leptinus testaceus* has been recorded from 16 lands so far, although the newest data come only from the Masurian Lakeland, the Białowieża Forest, the Świętokrzyskie Mountains, the Western Sudetes, the Bieszczady Mountains, and the Tatra Mountains. However, it is probably distributed in the whole Poland (BURAKOWSKI & all. 1978: *Katalog Fauny Polski*, **23**, 5: 1-356, KREISS 1988: *Mitt. Abt. Zool. Landesmus. Joanneum*: 41: 27-28, MAJEWSKI 2001: [In:] GUTOWSKI & JAROSZEWICZ B. (ed.): *Katalog Fauny Puszczy Białowieskiej*. IBL, Warszawa: 131, HAITLINGER 2006: *Zesz. Nauk. Uniw. Przyr.*

Wrocław, Biol. Hod. Zwierząt, **54** (548): 7-34, BIDAS & BUCHHOLZ 2007: Wiad. Entomol., **26** (4): 289-291, BYK & all. 2008: Wiad. Entomol., **27** (2): 115).

During the research on the coexistence of mammals from the family Gliridae and its parasites (Siphonaptera) in the Roztoczański National Park, the specimens of *Leptinus testaceus* were found directly on an edible dormouse *Glis glis* (LINNAEUS, 1766).

They were brushed off their fur while collecting fleas and in the burrows of an edible dormouse and a mouse (*Apodemus* sp.) found in the research boxes. The edible dormouse has not been hitherto reported as a host of *Leptinus testaceus* in Poland.

The beetle is a species new to Roztocze.

The new locality:

– FB41 Kosobudy Bór, (50°38'29.4"N / 23°03'37.4" E): 22 IX 2013 (2 exx.), 25 IX 2013 (1 ex.), brushed off the fur of edible dormice; 20 X 2013 (8 exx.), 22 X 2013 (3 exx.), collected from the edible dormouse burrows found in the boxes; 21 X 2013 (2 exx.), 4 VI 2014 (7 exx.), collected from mouse burrows found in the boxes devoted to the edible dormice.

The area with the boxes in the Roztoczański National Reserve was inspected regularly, once a month, from May to October. One of the methods used during the research was collecting fleas appearing directly on the mammals bodies of the family Gliridae. For this purpose, the fur of animals was combed with a fine-toothed brush, and then the brushed-off parasites were placed in test tubes with a 70% ethanol solution. All activities were performed in the field work. In October during the last inspection of the research area, the burrows of the mammals (the edible dormice and mice) found in the boxes were collected. The burrows contained in the boxes were additionally collected during the inspection conducted in June 2014. The burrows were examined by hand in the laboratory, and if present, fleas and beetles were collected from them. The collected insects were preserved in a 70% ethanol solution.

The biology and ecology of the beetles from the species *Leptinus testaceus* are poorly studied. In literature, one can find opinions that the beetle parasites on mammals, but it is rather a quite controversial and insufficiently documented thesis (BUCKLE 1976: Ecological Entomology, **1**: 1-6, PECK *ibid.*). *Leptinus testaceus* was found in the burrows of the yellow-necked mice *Apodemus flavicollis* (MELCHIOR, 1834) and wood mice *Apodemus sylvaticus* (LINNAEUS, 1758), located in decaying trunks and stumps, as well as individually in the burrows of the European hamster *Cricetus cricetus* (Linnaeus, 1758) and the European mole *Talpa europaea* (LINNAEUS, 1758). It was also found on a striped field mouse *Apodemus agrarius* (PALLAS, 1771), a field vole *Microtus agrestis* (LINNAEUS, 1761), a common vole *Microtus arvalis* (PALLAS, 1771), a European water vole *Arvicola amphibius* (LINNAEUS, 1758), a bank vole *Myodes glareolus* (SCHREBER, 1780), a common shrew *Sorex araneus* LINNAEUS, 1758, and even on a rabbit *Oryctolagus cuniculus* LINNAEUS, 1758 and badgers *Meles meles* (LINNAEUS, 1758). The specimens of *Leptinus testaceus* can be observed on the bodies of those mammals, hence probably the hypothesis regarding parasitizing (BUCKLE *ibid.*, BESUCHET 1980: Revue Suisse Zool., **87** (1): 131-142, HAITLINGER *ibid.*, BYK *ibid.*). In Slovenia, the species was not long time ago found in the fur of an edible dormouse (KAPLA 2001: Acta Entomologica, **9** (1): 27-33).

It is worth noting that the majority of reports of this species in our country concerns burrows or nests located in stumps or tree trunks—that is, on the ground or in its direct vicinity (BYK *ibid.*). Abroad, the species was also recorded from caves (VANDEL 1965:

Biospeleology. The Biology of Cavernicolous Animals. Pergamon Press, 524 pp.). As for the new locality in Roztocze, it is the first data from Poland on the occurrence of the species in the higher parts of a forest, in the hollows of arboreal mammals. The edible dormouse is strictly associated with arboreal spaces and exceptionally rarely descends to the ground. It lives mainly in hollows, in bird nests, as well as in boxes, which are perfect substitutes for natural burrows (KRYŠTUFEK 2010: Mammalian Species, **42** (865): 195-206). In winter, the edible dormice abandon their arboreal lifestyle in favour of underground burrows (JURCZYSZYN 2007: Folia Zool., **56** (2): 162-168), in which they hibernate from October to May (KRYŠTUFEK *ibid.*). One of the burrows, in which the presence of *Leptinus testaceus* was reported, before being inhabited by edible dormice, it was inhabited by a mouse (feces found in the material). Presumably, the beetle could have been transferred onto a new host, that is the edible dormice, by the mice themselves. As for the remaining burrows of edible dormice, in which *Leptinus testaceus* occurred, there are no premises suggesting that they were inhabited by mice. A further proliferation of this species in the forest complex in the arboreal space is probable, as foretically transferred beetles were found on the bodies of edible dormice.

The research in the Roztoczański National Park was conducted under the permission granted by the Ministry of the Environment, the permission no. DLPpn-4102-19/1025/13/RS, and the Director of the Roztoczański National Reserve, the permission no. 3/2013 and 14/2014.

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726 A new locality of *Osmoderma barnabita* (MOTSCHULSKY, 1845) (Coleoptera: Scarabaeidae) and *Dorcus parallelipedus* (LINNAEUS, 1758) (Coleoptera: Lucanidae) in Royal Baths Park in Warsaw.

KEYWORDS: *Osmoderma barnabita*, *Dorcus parallelipedus*, Scarabaeidae, Lucanidae, Warsaw, Poland, rare species.

The hermit beetle (*Osmoderma barnabita*), a representative of the family Scarabaeidae, is a rare and strictly protected species; covered by the European Union Habitats Directive and the Berne Convention, it is treated as a priority species. In the Red List of Endangered Animals in Poland, the species is classified to the VU category (SZWAŁKO 2004: [In:] Z. GŁOWACIŃKI, J. NOWACKI (ed.) Polska Czerw. Księga Zwierz. IOP PAN, Kraków, pp. 103-104.), and on the European Red List of Saproxyllic Beetles classified to the NT category (NIETO & ALEXANDER 2010: Europ. Red List Saprox. Beetl., Luxemburg). In Poland, excluding the mountainous regions, it is known from the localities from nearly all parts of the country. Separate records were reported from the Lubelszczyzna Region, Podlachia, Central Pomerania, and Mazovia (OLEKSA ed.: Ochrona pachnicy w Polsce. Wrocław). A Saproxyllic species, it prefers old and hollow deciduous trees (mainly *Quercus robur*, *Salix* spp. and *Tilia* spp.), in whose rotten wood larvae develop. Adult specimens are characterized with a limited dispersal ability, which allows them to fly the distance of approximately 2 km. Additionally, it endangers the beetles to extinction in case of destroying their habitats (DUBOIS & all. 2009: Landscape

Urban Plan., **91** (3): 152-159; RANIUS & all. 2005: Anim. Biodivers. Conserv., **28** (1): 1-44; HEDIN & RANIUS 2002: Comput. Electron. Agric., **35** (2-3): 171-180). Fragments of a dead specimen and characteristic feces falling from the rotten wood were found during an inventory of forest stands at the area of the Royal Baths Park:

- EC08 Warszawa, 15 IX 2014, 1 ex (fragments of elytron, mediastinum, and 3 legs) The Royal Baths Park, from a falling material out of a rotten wood in an old maple (*Acer platanoides* L.), leg. det. D. KUCHARSKI, coll. K. KUCHARSKA.

The tree, with 350 cm in diameter at breast height, standing in a certain distance from other trees, is well-lit by sunlight. The rotten wood, inhabited by beetles, occurs at the height of 3 meters, even though there are a few such spots on the main trunk in total and at different heights. In the rotten wood at the base of the trunk, there are numerous and dried feces of big rose chafers, probably *O. barnabita*. The lesser stag beetle (*Dorcus parallelipipedus*), a beetle from the family Lucanidae, until October 2014 had been covered legally by a species protection in Poland (PAWŁOWSKI & all. 2002: [In]: Z. GŁOWACIŃSKI (ed.): op. cit., pp. 88-110). Today, it is listed on the European Red List of Saproxyllic Beetles and classified to the LC category (NIETO & ALEXANDER 2010: op. cit.). It was recently recorded from the Kampinos National Park (MARCZAK 2010: Parki Nar. Rez. Przyn., **29** (2): 81-91). Similarly to the hermit beetle, it prefers dead wood of different deciduous trees. During the inventory of the tree stands, the remains of a second species were found at the same spot – the lesser stag beetle.

- EC08 Warsaw, IX 2014, 1♂ (head), the Royal Baths Park, in a falling material from a rotten wood on a maple (*Acer platanoides* L.), leg. D. KUCHARSKI, det. et coll. K. KUCHARSKA.

Reports regarding the occurrence of *O. barnabita* within the area of Warsaw are very rare. The current observation confirms the previous observations of this species from this area, conducted by the authors a few years earlier (ORCZYK i KUCHARSKI 2006: Kulon, **11**: 125-127). *D. parallelipipedus* was recorded within the area of the Royal Baths Park for the first time. The fragments of the evidence specimens are stored at the Zoology Institute of the Warsaw University of Life Sciences.

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727 A new locality of *Scopula umbelaria* (HÜBNER, 1813) (Lepidoptera: Geometridae) in Poland

KEY WORDS: Lepidoptera, Geometridae, *Scopula umbelaria*, new locality, Parchatka, SE Poland.

The species widely distributed in Central and South Europe and in East Asia (BUSZKO 2000: Atlas Motyli Polski. Cz. III). Out of 16 species of the genus *Scopula* SCHRANK, 1802 occurring in Poland, *S. umbelaria* belongs to the most rarely encountered and the least known representatives of the geometer moths. In the country, it used to inhabit few scattered localities in the lowlands. In the last 50 years, its presence was confirmed only from the Białowieża Forest (BUSZKO & all. 1996: Parki Nar. Rez. Przyn., **15**: 3-46) and Pieniny Mts. (BUSZKO & NOWACKI 2000: Polish Entomol. Monogr., **1**: 1-176).

– The Lublin Upland, Parchatka (51°22'26.4"N / 21°59'58.2" E), 157 m u. pt. flat, 17 V 2001, 1♂, leg. W. SEKULA.

The locality is situated in the northern part of the Kazimierz Landscape Park, and simultaneously in the special conservation area in the Nałęczów Plateau (PLH 060015) of the Natura 2000 programme. It comprises overgrowing limestone grass with a large angle of inclination in direction of the Vistula River, and is surrounded by a deciduous forest. In close vicinity, there is a network of loess sunken lanes, one of which directly adheres to the discussed area.

It is the first record of the occurrence of this species from the Lubelszczyzna Region; however, since its report in 2001, its presence from this area has not been confirmed.

The evidence specimen is stored in the first author's collection.

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728 A new locality of *Penthophera morio* LINNAEUS, 1767 (Lepidoptera: Lymantriidae) in Poland

KEY WORDS: Lepidoptera, Lymantriidae, *Penthophera morio*, new locality, Łysaków, SE Poland.

The species is distributed in Southeastern and locally Central Europe, as well as in the Caucasus Mountains. From Poland in the last 25 years, it was recorded from the Tatra Mountains, Lower Silesia and the Przemyskie Plateau. Not long ago, a report emerged on the observation of the species in the Babia Góra National Park in 2004. Moreover, in the past it was also recorded from two localities in Southwestern Poland, where today it does not probably occur. The species habitat comprises thermophilic grasses and mountain meadows (BUSZKO & MASŁOWSKI 2012: Motyle nocne Polski. Cz. I).

The new locality:

– the Lublin Upland, EB82 Łysaków (50°45'42.9" N / 22°11'15.9" E), 232 m u. pt. flat, 9 V 2014, 1♂, leg. W. SEKULA.

A specimen was collected during a sunny day from the peak of a limestone slope located on the verge of the Lublin Upland and the Sandomierz Basin in a plant community whose floristic content resembled an impoverished, dry Pieniny meadow *AnthyllidiTrifolietum montani* with a significant presence of *cyparissias*, *Medicago falcata*, *Coronilla varia* and *Helianthemum ovatum*. Fragments of the association *Thalictro-Salvietum pratensis* were also found, as well as a plant community with a dominance of *Calamagrostis epigeios* and a significant presence of xerothermic species. In the neighbouring area, bushes from the association *Peucedano cervariae-Coryletum* were present. At the moment, Łysaków is the northernmost and the most known locality for the occurrence of the species within its area, and simultaneously the place of the first record of the taxon in the Lubelszczyzna Region. The attention also deserves the very early date of its appearance at this locality in comparison with the national records gathered so far. The evidence specimen is stored in the first author's collection.

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