

FRAGMENTA FAUNISTICA

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Małgorzata LEŚNIEWSKA* and Małgorzata TABORSKA**

The centipede community of a beech forest in Magura National Park, Poland

Abstract: As the result of a provisional study in 2001-2002 of the centipede fauna and community structure of a Carpathian *Dentario glandulosae-Fagetum* beech forest in the Magura National Park, Poland, 24 species or subspecies of *Chilopoda* have been revealed. This amounts to 41% of all centipede species currently reported from Poland. The most abundant and frequently encountered species are *Lithobius burzenlandicus* VERHOEFF (eudominant, euconstant), *L. mutabilis* L. KOCH and *Strigamia acuminata* (LEACH) (both eudominants, accessorial species). The community is characterised by a large proportion of woodland species (15) while the remaining forms are eurytopic. Among the most interesting records in the study area are the following mountain species rarely found in Poland: *Dicellyphilus carniolensis* (C. L. KOCH), *Strigamia transsiloanica* (VERHOEFF), *Cryptops parisi* BROLEMANN, *Lithobius lucifugus* L. KOCH, *L. silvovagus* VERHOEFF, *L. matici* PRUNESCO and *Harpolithobius anodus* (LATZEL). The centipede population densities average 121 indiv./m², ranging between 46 and 217 indiv./m². Compared to other beech woodlands in Poland, the study forest is characterised by an exceptionally rich local fauna as well as the high centipede population densities. The community structure is very similar to that of the Carpathian beech forests in the Pieniny Mountains. The *Chilopoda* community features testify to the exceptional natural value of this area, which so far has never been studied in due detail.

Key words: *Chilopoda*, community analysis, beech forest, Poland

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Adrian SMOLIS and Dariusz SKARŻYŃSKI

Springtails (*Collembola*) of the „Przełom Jasiołki” reserve in the Beskid Niski Mountains (Polish Carpathians)¹

Abstract: During faunistic studies of the „Przełom Jasiołki” reserve in the Beskid Niski Mts (Polish Carpathians) 118 springtail species were recorded, including one new to the Polish fauna - *Deutonura weinerae*, and several rare species known only from a few localities in Poland and Europe: *Hypogastrura kelmendica*, *Cryptonura jubilaria*, *Wankeliella beskidica*, *Jevania weinerae*, *Anurida carpatica*, *Micranurida spirillifera*, *Appendisotoma julianae*, *Tetracanthella brevifurca*, *T. beskidica*, *Desoria blekeni*, *D. ruseki* and *Arrhopalites bifidus*. The most interesting springtail assemblages were recorded in soil from stony fields in a sycamore forest and in mosses growing on the Jasiołka riverside. The authors distinguished seven zoogeographical elements in the collembolan fauna of the reserve: Cosmopolitan, Holarctic, Palearctic, European, montane, Boreo-montane and South European. The fauna of springtails of the reserve is roughly comparable to the forest fauna of the Pieniny Mts and Bieszczady Mts.

Key words: *Collembola*, fauna of the Przełom Jasiołki reserve, Beskid Niski Mountains, Carpathians, Poland

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Eugeniusz BIESIADKA and Alicja KURZAŃKOWSKA

Water bugs (*Heteroptera*) of Neman River, some of its tributaries and riverine reservoirs

Abstract: In the middle flow region of Neman River, Belarus, 34 species of water bugs have been found to occur. The commonest species observed is *Micronecta griseola* HORV., followed by *Gerris lacustris* (L.), *Ilycoris cimicoides* (L.) and *Sigara falleni* (FIEB.). Five species have been recorded as new to Belarus: *Micronecta griseola*, *Sigara fallenoidea* HUNG., *Notonecta maculata* FABR., *Velia saulii* TAM. and *Gerris thoracicus* SCHUMM. From the River Neman proper, 24 water bug species have been reported, 25 in old river beds, 23 in larger tributaries, 12 in small tributaries and 8 in each type of water body, intermittent and others. Strong relations between the faunas of *Heteroptera* of Neman River and its old river beds as well as larger tributaries are emphasized.

Key words: Belarus, water bugs, species diversity

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Tomasz CIERZNIAK

Changes in the bee fauna (*Apoidea*) of the Wielkopolska National Park over the last half century

Abstract: Within the Wielkopolska National Park (W Poland) 225 species have been recorded, which accounts for 48% of the Polish bees fauna. Modern investigations have failed to confirm the occurrence of 44 bee species that were recorded in the Park in the 1930's. Among them, 19 species occurred in habitats that were later transformed to a large extent, so these species could really have disappeared. However, 80% of the 44 species are still recorded in adjacent regions, so the changes in the fauna of the Park seem to be only local. Thanks to the extensive knowledge of the bee community of the Park, this is a good area for monitoring quantitative and qualitative changes in bee resources.

Key words: *Apoidea*, long term changes in fauna, Wielkopolska National Park

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Beata GABRYŚ*, Waldemar CELARY** and Grażyna SOBOTA***

Apoidea (Hymenoptera) caught in yellow traps during spring and summer in agricultural landscape near Wrocław (Lower Silesia, Poland)

Abstract: Species diversity of bees and its ecological background were investigated in agricultural environment near Wrocław during spring/summer of 1999 and 2000. 1194 bees of seven families, 21 genera, and 72 species were collected. The most abundant were *Andrenidae* (30 species and 34,6% of all collected *Apoidea*), *Halictidae* (26 species and 33,9% of all *Apoidea*), and *Apidae* (5 species and 29,6% of all *Apoidea*). The most abundant species were *Apis mellifera* L. (150 individuals; 12,6% of all collected bees), *Andrena dorsata* (KIRBY) (108; 9%), *Evylaeus calceatus* (SCOPOLI) (90; 7,5%), *Seladonia tumulorum* (L.) (75; 6,3%), and *A. flavipes* (PANZER) (73; 6,1%). Almost all *Apoidea* were collected within the winter oilseed rape field (40%), in winter wheat (22%), and in the thickets (12%). Within the thickets, mostly *Andrenidae* and *Halictidae* were caught, while in oilseed rape and in winter and spring wheat the most numerous were *Apidae* and *Halictidae*. The most diversified fauna of *Apoidea* was found in winter oilseed rape - 42 species, and winter wheat - 39 species. Such high diversity and profusion of wild *Apoidea* in the studied area may be attributed to the mosaic structure of the landscape: the proximity of woods, presence of midfield thickets and stripes of flowering herbs that provide food, refuge and nesting space for these bees.

Key words: honey bee, wild bees, refugial environments, landscape structure

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Sergey A. BELOKOBYSKIJ

Two genera of subfamily *Doryctinae* (Hymenoptera, Braconidae) new for Poland

Abstract: The *Doryctinae* genera *Hypodoryctes* Kokujev (with *H. sibiricus* KOKUJEV) and *Rhaconotus* RUTHE [with *Rh. elegans* (FÖRSTER)] are recorded for the first time for the fauna of Poland. Redescriptions and figures of the these genera and species are given. *H. sibiricus* is first time reported for Bulgaria. Possible host of *Hypodoryctes* species is discussed.

Key words: *Hymenoptera*, *Braconidae*, *Doryctinae*, *Hypodoryctes*, *Rhaconotus*, redescriptions, new records, host, *Cerambycidae*, Poland, Bulgaria

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Wiesława CZECHOWSKA and Wojciech CZECHOWSKI

**Further record of *Lasius neglectus* VAN LOON, BOOMSMA *et* ANDRASZALVY
(Hymenoptera: Formicidae) for Warsaw, with a key to the Polish species
of the subgenus *Lasius s.str.***

Abstract: Three new sites of *Lasius neglectus*, an expansive invasive polygynous and polydomous ant species, are reported from Warsaw, its northernmost known locality. A key to the Polish representatives of the subgenus *Lasius s.str.* is given.

Key words: ants, *Lasius neglectus*, pest species, urban fauna, key, fauna of Poland

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R. Henry L. DISNEY

Revision of *Gymnoptera* LIOY (*Diptera*, *Phoridae*)

Abstract: The six known species are reduced to three by the proposal of *G. orientalis* (MEIJERE), *G. molluscovora* (BOHART) and *G. neotropica* BORGMEIER as synonyms of *G. simplex* (BRUES). A key to both sexes of the three species now recognised is provided.

Key words: *Phoridae*, *Gymnoptera*, new synonyms, key

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Janusz KUPRYJANOWICZ

Spiders (*Araneae*) of open habitats in the Biebrza National Park, Poland²

Abstract: The main aim of the study was to characterise the communities of spiders from 26 open typical habitats of the Biebrza River valley. The habitats were located in different ecological zones of the valley and formed a humidity gradient. Here, I compare spider species composition, their diversity and dominance structure, studied in the years 1991–1996 and 2002. A total of 56898 spiders were collected, representing 285 species from 21 families. The majority of the spider species were hygrophilous and peat-bog species. Least abundant were forest and eurytopic species as well as those of unknown environmental preferences. Among the 285 species, 20% (49 species) were rare, i.e. known from fewer than 10 localities in Poland. The largest numbers of rare species were found in sedge marshes. Diversity (H') and evenness (J') indices were highest in sedge marshes, psammophilous grasslands, and natural wet meadows. The lowest indices were obtained for aquatic and anthropogenic habitats (mowed meadows, sweet marsh). In meadows and on sedge marshes the diversity of spider communities increased with humidity and vegetation diversity of the habitat. Similarity of species composition ($S_{0>50\%}$) was highest among spider communities found in habitats of similar vegetation structure (sedge marshes, psammophilous grassland), similar humidity (marshes) and in mowed plant communities (meadows and *Glyceria* marshes).

Key words: freshwater marshes, meadows, psammophilous grassland, flooded valley

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Beata JAKUBIK

Molluscs (*Mollusca*) of the River Muchawka (South Podlasie Lowland, Siedlce Plateau, Poland)

Abstract: The study of molluscs of the River Muchawka in 1999 and 2000 revealed the presence of 12 species of molluscs, including 5 species of bivalves and 7 species of snails. Dominant species included *Pisidium amnicum* (L.) and *Sphaerium rivicola* (L.) among bivalves, and *Bithynia tentaculata* (L.) and *Lymnaea stagnalis* (L.) among snails. *Unio pictorum* (L.), a protected species, was recorded in the upper course and at the river mouth. The highest number of species were found in the upper watercourse and the lowest at sites near the river mouth.

Key words: molluscs, Muchawka River, fauna Poland

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