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POLISH ACADEMY OF SCIENCES

FRAGMENTA FAUNISTICA

Fragm. faun.	Warszawa, 31.12.2002	**45**	91–100

Marcin SMOLEŃSKI

Structural pattern of epigeic community of staphylinids (*Coleoptera, Staphylinidae*) in coastal pine forest[1]

Abstract: The dominance structure of a natural community of staphylinids in a coastal pine forest is described using a Saturation-Growth Rate (*SGR*) type function: y = ax/(b+x). The function is based on per cent contributions of individual species. This makes it possible to carry out comparative analyses of communities' actual structures and their deviation from the assumed model, regardless of the actual size of the communities being analyzed.

Key words: dominance structure, community, cumulative function, *Staphylinidae*, coastal pine forest

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FRAGMENTA FAUNISTICA

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Marcin SMOLEŃSKI

Assessment of microsite diversity of the coastal variety of Scots pine forests: the sink and source theory applied to epigeic staphylinids (*Coleoptera*: *Staphylinidae)* at the populational and community level[1]

Abstract: This methodology-oriented paper proposes a number of new zooindicative indices assessing microsite diversity based on the modified Pulliam theory. The original theory has been modified so that the "source & sink" concept could be used for the purposes of zooindication. In the present paper, the following indices are tested on data regarding populations and communities of invertebrates of the coastal variety of Scots pine forest: the share of sources (U_C), sinks (U_P) and standard (U_S) in the area occupied by the community, an index of microsite preferences of a species (c_s) and an index of utilization of site heterogeneity by a given species (C_s'). Microsite diversity was also assessed using data regarding the coastal pine forest of Mierzeja Łebska Sand Bar.

Key words: zooindication, microsites, heterogeneity, communities, populations, *Staphylinidae*, *Empetro-nigri Pinetum* – coastal pine forest

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INTRODUCTION

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FRAGMENTA FAUNISTICA

Fragm. faun.	Warszawa, 31.12.2002	**45**	115–122

Katarzyna SZCZEPKO*, Tadeusz PAWLIKOWSKI** and Jan K. KOWALCZYK***

Apoidea (*Hymenoptera*) in habitats of former agriculture area in a renaturization stage of Kampinos National Park (Poland)

Abstract: Wild bee community in habitats of abandoned village in forest territory of Kampinos National Park was studied. From 1998 to 1999, 77 species of *Apoidea* were registered, including 21 not recorded so far from the Kampinos National Park and 11 for Mazovian Lowland. Bees in the studied habitats represented 8 zoogeographical elements, of which the widely distributed species: palearctic, european, eurosiberian and holarctic accounting for about 95%. As regarding the number of species, the most attractive habitats were the area of the Field Centre (anthropogenic plant communities) and the xerothermic grassland with an admixture of synanthropic plants, 44 and 31 respectively. The lowest number of species was registered in the moist meadow. The values of Marczewski-Steinhaus' index (0,05< *MS* <0,33) indicated on considerable qualitative differences in bee species composition between all studied habitats.

Key words: *Apoidea*, *Hymenoptera*, former agriculture area, abandoned village

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FRAGMENTA FAUNISTICA

Fragm. faun.	Warszawa, 31.12.2002	**45**	123–130

Marcin SIELEZNIEW* and Anna STANKIEWICZ**

First data on host-ant specificity of parasitic *Maculinea alcon* (DEN. & SCHIFF.) (*Lepidoptera: Lycaenidae*) in Poland and eastern Europe

Abstract: Host-ant specificity of *Maculinea alcon* and habitat requirements were studied on two sites (near Warsaw and in Polesie in eastern Poland) for the first time in Poland and also in this part of Europe. We found *M. alcon* full-grown larvae and pupae exclusively in *M. scabrinodis* nests – the commonest ant on both sites. Besides this species, *M. rubra*, *M. ruginodis*, *M. gallienii* were also observed. Our findings are important for its practical conservation of this threatened species in Poland. Observed and predicted changes in habitat management, especially abandonment, affect the structure of vegetation which is followed by changes in ant communities. We predict that overgrowing causes replacement of *M. scabrinodis* by other more hygrophilous *Myrmica* species and also makes the worse conditions for *G. pneumonanthe* – the host-plant of young *M. alcon* larvae.

Key words: *Maculinea alcon*, host–ant specificity, *Myrmica scabrinodis*, myrmecophily, endangered species, Poland

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Fragm. faun.	Warszawa, 31.12.2002	**45**	131–145

Grażyna WINIARSKA

Butterflies and moths (*Lepidoptera*) in urban habitats: the moths of Warsaw
I. *Noctuidae, Pantheidae, Nolidae*

Abstract: 302 moth species of the families *Noctuidae*, *Pantheidae* and *Nolidae* have been recorded in Warsaw to date. Of these, in historical times were recorded 286 species (86 of them only then, including one – *M. acetosellae,* which can no longer be found in Poland). Most of these species are now regarded as very rare and occurring only locally in Central Europe (*e.g. I. calvaria*, *S. taenialis*, *C. pacta*, *P. moneta*, *P. cheiranthi*, *H. ononis*, *A. caliginosa*, *D. oo, T. ludifica*). Contemporary records list 212 species, most of which are widely distributed in Poland and classified as abundant (e.g. *D. trifolii*, *M. pallens*, *X. c-nigrum*, *A. exclamationis*). 7 species: *M. confusa*, *A. gamma*, *S. scutosa, H. peltigera, S. exigua, L. zollikoferi and A. ipsilon* are migrant visitors.

Key words: *Noctuidae, Pantheidae, Nolidae, Lepidoptera*, urban habitats, Warsaw

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R. Henry L. DISNEY

A new species of short-winged *Triphleba* RONDANI (*Phoridae: Diptera*) from North America

Abstract: *Triphleba brevipennis* n. sp. is described from the U.S.A. Both sexes have abbreviated wings. The hitherto unknown female of *T. parvifurca* BORGMEIER,1963 is described and the male hypopygia of it and of *T. leptoneura* BORGMEIER, 1963 are illustrated.

Key words: *Phoridae, Triphleba,* new species, Nearctic

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Fragm. faun.	Warszawa, 31.12.2002	**45**	163–167

Małgorzata SKRZYPCZYŃSKA

Studies on the occurrence frequency of insects and mites causing galls on leaves of hornbeam *Carpinus betulus* L. in southern Poland[2]

Abstract: Studies on the species composition of galls occurring on the leaves of *Carpinus betulus* L. were conducted in 2001 in the following three localities: the Wolski Forest, the Ojców National Park and the Krzeszowice Forest District (UTM-DA-16). A total of 1852 galls were found. The galls were caused by insect or mite species. *Aceria macrotricha* (NALEPA, 1919) was the most abundant species. The index of occurrence frequency and the Agrell index of species association have been calculated..

Key words: *Diptera, Acarina*, plant-galls, *Carpinus betulus*

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