

Artykuły naukowe / Scientific articles

Strony / Pages: 33-51

Ważki (Odonata) stwierdzone podczas X Ogólnopolskiego Sympozjum Odonatologicznego PTE „Ważki Rezerwatu Biosfery «Puszcza Kampinoska»” (Izabelin, 28–30 VI 2013 r.)

Dragonflies (Odonata) recorded during the 10th National Symposium of Odonatology of the Polish Entomological Society “Dragonflies of the Biosphere Reserve «Kampinos Forest»” (Izabelin, June 28–30, 2013)

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Abstract. During the field session of the 10th National Odonatological Symposium of the Polish Entomological Society the Biosphere Reserve “Kampinoski Forest” was faunistically investigated. The biosphere reserve lies in Central Poland encompassing the Kampinoski National Park and its buffering zone. At 16 sites 34 dragonfly species were discovered, the most valuable habitats were peat bogs and fish ponds. *Erythromma viridulum* and *Gomphus flavipes* have been recorded for the first time within the boundaries of the Kampinoski National Park. Other rare species in the studied area were: *Calopteryx virgo*, *Lestes virens*, *Erythromma najas*, *Aeshna affinis*, *A. juncea*, *Anax parthenope*, *Ophiogomphus cecilia*, *Libellula fulva*, *Or-*

thetrum albistylum and *Leucorrhinia pectoralis*.

Territorial males of *E. najas* were found among others in untypical habitat: the zone of the riverbank of Vistula. This can be explained as a mistake in choice of the habitat: males were fighting fiercely for patches of foam and plant debris floating on the water surface after the rising of the river which looked like the stems of *Ceratophyllum* sp. approaching the water surface.

The initial inventory of the population of *Nehalennia speciosa* was taken specifying its numbers from a few to about 10 000 specimens. It inhabits the raised bog "Długie Bagno", regenerated after complete removal of peat about 90 years ago, with untypical of the habitats *N. speciosa* plant composition: without sedges, with dominating *Eriophorum vaginatum* and numerous *Betula pubescens* which died mostly after 2009 (according to the analysis of aerial photographs). This indicates the recent colonization of the raised peat bog or the fresh explosion of previously small population which inhabited not numerous, the wettest depressions. The numbers of *N. speciosa* were the highest in *Eriophorum vaginatum*-*Sphagnum fallax*: the number of imagines in two areas with this plant community was estimated at 1 800–1 900 individuals.

Together with *Erythromma viridulum* and *Gomphus flavipes* in the Kampinoski National Park 51 dragonfly species have been recorded, nevertheless, at least a few next species are expected very likely to be found in the future. This is one of the richest in this respect Polish national parks. It is an important "hot spot" of the species richness of dragonflies, especially for Central Poland, including relatively faunistically poor Mazowsze region. This is all the more interesting that the Kampinoski National Park is poor in surface waters (0.4% of the area) – however, they are habitually diversified, situated in compact forest complex, and the lack of some natural habitats is compensated by anthropogenic waters. However, the role of the discussed park in protection of rare and endangered species is small.

Key Words: Odonata, dragonflies, central Poland, forest, biosphere reserve, national park, records, *Nehalennia speciosa*.

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Notatki / Notes

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Interesujące obserwacje ważek (Odonata) w piaskowni w Borowej (Polska środkowo-wschodnia)
Interesting observations of dragonflies (Odonata) in the sand excavation in Borowa (middle-eastern Poland)

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Abstract. During the initial studies of a sand excavation in Borowa near Dęblin (51°31'N, 21°51'E, UTM EC50) 25 dragonfly species were recorded of which 23 were autochthonic or probably autochthonic. The most interesting were: *Coenagrion lunulatum*, *Gomphus vulgatissimus*, *Crocothemis erythraea*, *Leucorrhinia albifrons* and *L. caudalis*. The studied object seems to be a quite stable secondary habitat of the dragonfly assemblage rich in species with the species associated with lake littoral among others. The crucial factor inhibiting the succession of this assemblage is the use of the part of the water bodies as bathing waters.

Key Words: Dragonflies, Odonata, central-eastern Poland, sand pit, secondary habitat.

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Artykuły Przeglądowe / Review Articles

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Narządy zmysłów i budowa mózgu ważek w zestawieniu z innymi owadami Sense organs and the construction of the brain of dragonflies in comparison to other insects

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Abstract. The perception of dragonflies is different than that of most insects because it does not rely on odour reception. The most important is their sense of sight. Well-developed structure of the brain responsible for vision and motor coordination allows dragonflies being quick and proactive hunters. Analyzing the anatomy of the dragonflies' brain we can find some evidences of their evolutionary heritage. Odonata are – after all – one of the oldest orders of insects and these primary features of dragonflies' brain make their perception different from holometabolic insects.

Key Words: Odonata nervous system, insect brain, insect sensory system.

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Literatura i recenzje / Literature and reviews

Strony / Pages: 56-60

Polskie i dotyczące Polski prace odonatologiczne. 12. Rok 2013 Polish and dedicated to Poland odonatological papers. 12. The year 3

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Abstract. The author presents a list of Polish and dedicated to Poland odonatological papers that were published in the year 2013. In the reported time period, 47 papers of various kind were published. One paper published in the year 2012 is given too.

Key Words: Odonata, dragonflies, bibliography, 2013, Poland, Polish authors.

Strony / Pages: 61-62

Recenzja. Kornijów R., Buczyński P. (red.). Jezioro Skomielno (Pojezierze Łęczyńsko-Włodawskie, Polska Wschodnia). Monografia przyrodnicza. Wydawnictwo Mantis, Olsztyn 2012, 368 pp.

Review. Kornijów R., Buczyński P. (eds.). Lake Skomielno (Łęczna-Włodawa Lakeland, Eastern Poland). Environment Monograph. Mantis Publishing, Olsztyn 2012, 368 pp.

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Abstract. The monograph presents the history of a mesotrophic Lake Skomielno (the Łęczna-Włodawa Lakeland, Eastern Poland), 40 years ago incorporated in the Wieprz-Krzna Canal system which resulted in the doubling of its depth and area. The changes which appeared later were the reason for studying and ana-

lysing abiotic and abiotic elements of the lake ecosystem. An important part of the monograph is the chapter devoted to dragonflies (Odonata), of which 36 species in the lake and the closest area were recorded.

Key Words: Odonata, dragonflies, monograph, review, Poland, mesotrophic lake, lakeland.