

**OSMYLUS FULVICEPHALUS (NEUROPTERA: OSMYLIDAE) IN LITHUANIA  
– THE INSECT OF THE YEAR 2019: CAMPAIGN REVIEW AND RESULTS***ANDRIUS PETRAŠIŪNAS*

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**Introduction**

The giant lacewing *Osmylus fulvicephalus* (Scopoli, 1763) is found in most of the European countries (Letardi *et al.*, 2019). From the Fennoscandian countries it is not found in Norway, but occurs in the southern parts of Sweden, southwest parts of Finland and in eastern parts of Denmark (Artsdatabanken, 2019). It is listed in the Swedish Red list as Near Threatened (Artfakta, 2019) and in the Red Data book of Latvia, category 1 (Vimba *et al.*, 2004).

The giant lacewing was recently (Ivinskis, 2018) evaluated using IUCN categories and categorized as “EN B1ab (ii,iii)+2ab“, sparking some discussions among the Lithuanian entomologists about the actual rarity of this species. Following those discussions, Lithuanian Entomological Society selected the giant lacewing as the “Insect of the Year 2019”, with the aim to collect data on the distribution of this insect in Lithuania.

Several groups of Neuroptera were earlier described in Lithuanian literature with simple (Lešinskas & Pileckis, 1967) or more precise keys (Podėnas, 1999), but there is generally no distribution data of Lithuanian Neuroptera published so far, except five species listed from Ignalina (Ulmer *et al.*, 1916) more than a hundred years ago. Hence it is not surprising, that we could find only one record of *O. fulvicephalus* from Švenčionys district (Kovács *et al.*, 2008) and a map with findings in Lithuania, but without locality data (Ivinskis, 2018). This paper adds to our sparse knowledge about the populations of the giant lacewings in our country..

**Material and Methods**

Members of the Lithuanian Entomological Society as well as general public were asked to provide data on the sightings of the giant lacewing and to fill out the online forms. Only three forms were provided in such a way by A. Čerkauskas, team of R. Karpavičius, A. Petraška and G. Eigirdas, and M. Kaupys, but data on several more sightings were directly provided by S. Podėnas and V. Podėnienė. Websites of Nature photographers were checked for the photographs of this species, but only several, made by R. Ferenc were found on Macrogamta.lt – same specimens are stored in T. Ivanauskas Museum of Zoology in Kaunas. Finally, collections of Museum of Zoology of Vilnius University, Vilnius (MZVU) were checked by the author and R. Ferenc kindly provided data on the holdings of Kaunas T. Ivanauskas Museum of Zoology, Kaunas (TIMZ). As not that many records of *Osmylus fulvicephalus* were collected, full names of data providers or those found on labels in collections are given.

Distribution map was produced using the SimpleMappr online tool (Shorthouse, 2010).

## List of localities

Locality	Administrative district	Coordinates (LAT, LONG)
Butkaičiai	Jurbarkas district	55.246290, 22.812239
Didkiemis, Aušbruvos river	Šilalė district	55.371368, 22.148917
Jiesia Landscape reserve (1)	Kaunas district	54.847138, 23.934194
Jiesia Landscape reserve (2)	Kaunas district	54.851916, 23.939194
Jiesia Landscape reserve (3)	Kaunas district	54.847185, 23.933601
Jurijonai (Vėžaitinės miškas f.)	Klaipėda district	55.757262, 21.571761
Kalviai	Jurbarkas district	55.072305, 23.354777
Kruonis	Kaišiadorys district	54.751388, 24.231888
Lūžų miškas f.	Zarasai district	55.645750, 25.864354
Musninkai	Širvintos district	54.941155, 24.821346
Puvočiai (1)	Varėna district	54.1150, 24.3030
Puvočiai (2), Grūda river	Varėna district	54.119495, 24.306664
Ringovė	Kaunas city	55.051027, 23.522916
Šatės	Skuodas district	56.173551, 21.768632
Tervydoniai (1)	Šakiai district	55.027428, 23.446276
Tervydoniai (2)	Šakiai district	55.028055, 23.443497
Tervydoniai (3)	Šakiai district	55.027300, 23.446445
Utiėka	Varėna district	54.082349, 24.161678
Vilnius	Vilnius city	-

## List of species

***Osmylus fulvicephalus* (Scopoli, 1763)**

Butkaičiai, 01 06 1995, 1 spec., V. Uselis (MZVU); Didkiemis, Aušbruvos river, 07 06 1994, 1 spec., V. Uselis (MZVU); Jiesia Landscape reserve (1), 09 06 2000, 2 spec., R. Ferencė (TIMZ); Jiesia Landscape reserve (2), 17 06 2000, 1 spec., R. Ferencė (TIMZ); Jiesia Landscape reserve (3), 03 06 2010, 1 spec., R. Ferencė (TIMZ); Jurijonai, Vėžaitinės miškas f., 30 06 2019, 1 spec. attracted to 500W Hg light at night, M. Kaupys (observation); Kalviai, by the Armena rivulet, 19 07 1999, 1 spec., R. Ferencė (TIMZ); Kruonis, by the Kruonė rivulet, 27 07 1998, 1 spec., A. Meržijevskis (TIMZ); Lūžų miškas f., by the Šavaša (Šėduikiai) rivulet, 10 06 2019, 1 specimen, A. Čerkauskas (observation); Musninkai, banks of Musė river, 20 07 2019, ~ 20 specimens, S.Podėnas, V. Podėnienė (observation); Puvočiai (1), 16 07 1979, 1 spec., P. Ivinskis (TIMZ); Puvočiai (1), 13 07 1982, 1 spec., Kregždys (MZVU); Puvočiai (1), 25 07 1991, 1 spec., collector unknown (MZVU); Puvočiai (1), 21 07 1992, 1 spec., G. Žurauskaitė (MZVU); Puvočiai (1), 03 08 2012, 1 spec., J.Viltrakytė (MZVU); Puvočiai (1), 19 06 2016, 1 spec., A. Rutkauskaitė (MZVU); Puvočiai (2), banks of Grūda river, 10 08 2019, 1 spec., I. M. Sokolovaitė (MZVU); Puvočiai (2), banks of Grūda river, 10 08 2019, 1 spec., T. Laurinaitis (MZVU); Ringovė, by the Ringovė rivulet, 08 06 1990, 1 spec., R. Ferencė (TIMZ); Šatės, Šatės rivulet, 07 06 2019, 2 spec., R. Karpavičius, A. Petraška, G. Eigirdas (observation); Tervydoniai (1), 22 06 2013, 1 spec., 07 07 2013, 12 spec., 26 07 2014, 2 spec., R. Ferencė (TIMZ); Tervydoniai (2), 03 07 2015, 1 spec., R. Ferencė (TIMZ); Tervydoniai (3), 09 07 2016, 1 spec., R. Ferencė (TIMZ); Utiėka, banks of

Nemunas river, 29 06 2019, ~ 20 specimens, S.Podėnas (observation); Vilnius, 26 06 1982, 1 spec., P. Ivinskis (TIMZ).

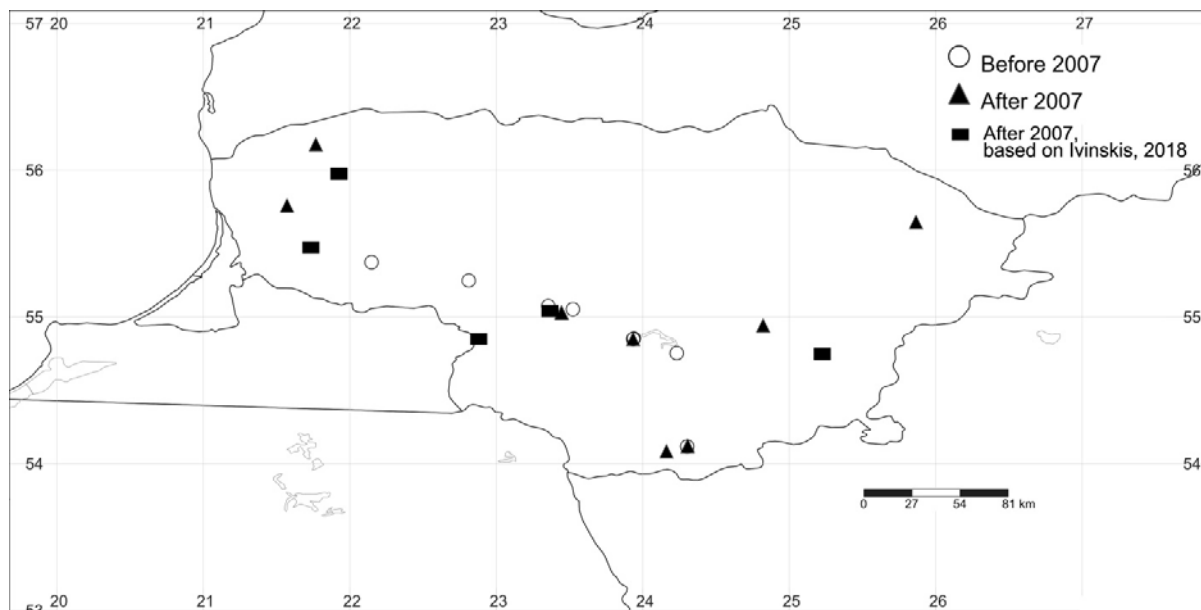


Fig. 1. Distribution of *Osmylus fulvicephalus* in Lithuania before and after 2007, based on location data provided in this paper (marked in circles and triangles) and data adapted from Ivinskis (2018) (marked in rectangles).

## Discussion

Earlier published records (Kovács *et al.*, 2008; Ivinskis, 2018) of *Osmylus fulvicephalus* might suggest that this species is not common in Lithuania. However, the general notion of entomologists is that the giant lacewing is found in most of the places with suitable habitats, but because adults usually hide in the vegetation, it is not observed as often. Observations by S.Podėnas and V.Podėnienė near Musninkai and Utieka show, that in suitable conditions tens of individuals gather to hide in the same place.

Because of prolonged drought, some of the smaller streams around Tervydoniai have dried out and *O. fulvicephalus* were not observed in 2019, although they were previously found in those places (R.Ferenca, pers. comm.). This drought might be one of the reasons why such a low number of observations were registered in 2019.

Older records of *O. fulvicephalus* from Puvočiai (1) are mainly based on student collections and although Puvočiai is indicated on the label, the actual place where insects were found could be in a radius of about 5–7 km from the village, most probably at the banks of the rivers Grūda, Skroblus or Merkys.

Specimens of *O. fulvicephalus*, collected before 2007 were mainly from the central and southern parts of Lithuania (Fig. 1), but more recent data provided here and also by Ivinskis (2018) added points in western and eastern parts of the country. Central-northern part of Lithuania still has no records of *O. fulvicephalus* (Fig. 1), but recent records from Zarasai and Skuodas districts show, that this might be connected to a lack of research effort, not the actual absence of the species.

**Acknowledgements**

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**Akcijos „Metų vabzdys 2019 – geltongalvis tinkluotis (*Osmylus fulvicephalus* (Neuroptera: Osmylidae))“ apžvalga ir rezultatai**

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**Santrauka**

Straipsnyje pateikiami Lietuvos entomologu draugijos vykdytos akcijos “2019 metų vabzdys – Geltongalvis tinkluotis *Osmylus fulvicephalus* (Scopoli, 1763)” rezultatai.

Apžvelgiami surinkti duomenys apie akcijos metu stebėtus ar fotografuotus geltongalvius tinkluočius, jų paplitimą Lietuvoje, kartu apimant ir šalies muziejuose saugomus vabzdžius.

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