

## RARE SPECIES OF LEPIDOPTERA AND ODONATA RECORDED FROM THE ENVIRONMENTS OF LAKE PRAVIRŠULIS (CENTRAL LITHUANIA) IN 2007–2008

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### Introduction

This study is part of the ecological monitoring projects run by the association „Sargeliai bendruomenės centras“ and financed by the UNDP Small grants programme together with the Lithuanian Ministry of Agriculture and by Heifer International to establish environment-friendly agricultural landscape around the Praviršulio Tyrelis conservation area.

### Material and Methods

The area of observations includes sites in a radius up to seven kilometers from the Praviršulis lake. Many of the localities are part of the Praviršulio Tyrelis conservation area. The studies were conducted along the Žadikė – a small canalized rivulet in wet *Alnus glutinosa* forest ( $55^{\circ}33'10''N$ ,  $23^{\circ}26'29''E$ ), close to the Praviršulis lake (a 70 ha large bog pond,  $55^{\circ}30'37''N$ ,  $23^{\circ}26'29''E$ ), drained but now restored by beavers fenny lake Kragai – (area 2 ha,  $55^{\circ}32'20''N$ ,  $23^{\circ}25'00''E$ ), a former peat-cutting site, abandoned in the 1960s and quite well renaturized ( $55^{\circ}30'04''N$ ,  $23^{\circ}27'18''E$ ), wet meadows in the southeastern part of the conservation area belonging to the abandoned village Liaubarai ( $55^{\circ}29'26''N$ ,  $23^{\circ}28'14''E$ ), the forest Ilgšilis – drained bog woodland ( $55^{\circ}27'26''N$ ,  $23^{\circ}27'59''E$ ), the forest Borkus – mixed dry forest ( $55^{\circ}28'28''N$ ,  $23^{\circ}28'01''E$ ), the village Papušinys (wet meadows, wet forest edges,  $55^{\circ}27'56''N$ ,  $23^{\circ}27'04''E$ ), the village Sargeliai, dry meadows, forest edges ( $55^{\circ}28'38''N$ ,  $23^{\circ}27'25''E$ ).

Nocturnal moths were attracted by light (24 W energy saving lamp). Few individuals of Odonata emerged from accidentally collected larvae. All species were identified on the basis of photos only, and no specimen was captured.

The paper presents species that are included into the Red Bata Book of Lithuania (Rašomavičius, 2007), species that are called „rare“ in the checklist of Lithuanian Lepidoptera (Ivinskis, 1993), and species that are given by P. Ivinskis & J. Augustauskas (2004) from few sites only. The nomenclature follows O. Karsholt & van E.J. Nieuwerken (2007). Pictures of nocturnal moths were taken mostly in Sargeliai (Sargelių...).

## Results

43 species of rare insects were recorded during the research period. Of these, seven species of Lepidoptera (*Papilio machaon* (L., 1758), *Glaucoopsyche teleius* (Bergsträsser, 1779), *Euphydryas aurinia* (Rottemburg, 1775), *Melitaea diamina* (Lang, 1789), *Lopinga achine* (Scopoli, 1763), *Coenonympha tullia* (Müller, 1764), and *Coenonympha hero* (L., 1758)), and three species of Odonata (*Ischnura pumilio* (Charpentier, 1825), *Leucorrhinia pectoralis* (Charpentier, 1825), and *Ophiogomphus cecilia* (Fourcroy, 1785)) are included into the Red Data Book of Lithuania.

### LEPIDOPTERA

#### PYRALIDAE

***Chilo phragmitella* (Hübner, 1805)**

Sargelai, 13 07 2008, 1 spec.

***Conobathra repandana* (Fabricius, 1798)**

Sargelai, 11 07 2008, 1 spec.

***Ecpyrrhoe rubiginalis* (Hübner, 1796)**

Sargelai, 22 08 2008, 1 spec.

***Myelois circumvoluta* (Fourcroy, 1785)**

Sargelai, 13 07 2008, 1 spec.

***Epascestria pustulalis* (Hübner, 1823)**

Sargelai, 20 06 2008, 1 spec.

***Udea decrepitalis* (Herrich-Schäffer, 1848)**

Sargelai, 08 08 2008, 1 spec.

#### LASIOCAMPIDAE

***Lasiocampa quercus* (Linnaeus, 1758)**

Sargelai, 24 07 2008, 1 female

#### SPHINGIDAE

***Hemaris fuciformes* (Linnaeus, 1758)**

Sargelai, 16 06 2008, 1 spec. at *Lychnis viscaria* L.

***Macroglossum stellatarum* (Linnaeus, 1758)**

Sargelai, 13 06 2008, 1 spec. at *Lychnis viscaria* L.

***Hyles galii* (Rottemburg, 1775)**

Sargelai, 30 05 2008, 1 spec.

#### HESPERIIDAE

***Thymelicus sylvestris* (Poda, 1761)**

Sargelai, 07 2007, 07 2008, several spec.

#### PAPILIONIDAE

***Papilio machaon* (Linnaeus, 1758)**

Sargelai, 27 07 2007, 1 spec.

#### PIERIDAE

***Aporia crataegi* (Linnaeus, 1758)**

Sargelai, 21 06 2008

***Colias palaeno* (Linnaeus, 1761)**

Ilgšilis, 27 06 2008, 1 male; Praviršulis, 01 07 2008, several spec.

## LYCAENIDAE

*Satyrium w-album* (Knoch, 1782)

Papušinys, 02 08 2008, 1 spec. on *Eupatorium cannabinum* L.

*Satyrium spini* (Denis & Schiffermüller, 1775)

Sargelai, 16 07 2007, 1 spec., 08 08 2008, 1 spec.

*Satyrium ilicis* (Esper, 1779)

Sargelai, 16 07 2007, 1 spec.

*Glaucopsyche teleius* (Bergsträsser, 1779)

Papušinys, 05 07 2007, ~ 10 spec., meadows with *Sanguisorba officinalis* L.

*Plebeius agestis* (Denis & Schiffermüller, 1775)

Sargelai, 25 07 – 05 08 2007, several spec. feeding on *Berteroia incana*.

## NYMPHALIDAE

*Nymphalis xanthomelas* (Esper, 1781)

Ilgšilis, 22 07 2007, 1 spec.

*Euphydryas aurinia* (Rottemburg, 1775)

Liaubarai, 23 06 2007, few spec.

*Melitaea phoebe* (Denis & Schiffermüller, 1775)

Sargelai, 31 05 2008, 1 spec.

*Melitaea diamina* (Lang, 1789)

Liaubarai, 23 06 2007, 10 06 2008, 07 07 2008, 1 spec.

*Limenitis populi* (Linnaeus, 1758)

Borkus, 12 06 2007, 1 spec.

*Apatura ilia* (Denis & Schiffermüller, 1775)

Sargelai, 18 07 2008, 1 spec.

*Pararge aegeria* (Linnaeus, 1758)

Sargelai, Borkus, 28 07 2008, single spec. at both sites

*Lopinga achine* (Scopoli, 1763)

Papušinys, 25 06 2008, ~ 50 spec.

*Coenonympha tullia* (Müller, 1764)

Liaubarai, 03 08 2008, > 100 spec.

*Coenonympha hero* (Linnaeus, 1758)

Liaubarai, 14 06 2007, 1 spec.; Papušinys, 29 05 2008, ~10 spec.;

## GEOMETRIDAE

*Perizoma bifaciata* (Haworth, 1809)

Sargelai, 02 08 2008, 1 spec.

*Eupithecia assimilata* (Doubleday, 1856)

Sargelai, 28 07 2008, few spec.

*Eupithecia sinuosaria* (Eversmann, 1848)

Sargelai, 20 06 2008, 2 spec.

*Triphosa dubitata* (Linnaeus, 1758)

Sargelai, 28 07 2008, 1 spec.

## NOCTUIDAE

*Eucarta virgo* (Treitschke, 1835)

Sargelai, 13 07 2008, 1 spec., 07 09 2008, 1 spec.

*Cucullia lucifuga* (Denis & Schiffermüller, 1775)

Sargelai, 21 06 2008, 1 caterpillar

***Simyra albovenosa* (Goeze, 1781)**

Sargelai, 17 05 2008, 1 spec.

***Euchalcia modestoides* (Poole, 1989)**

Sargelai, 15 06 2007, 1 spec.

***Amphipyra livida* (Denis & Schiffermüller, 1775)**

Sargelai, 03 09 2008 1 spec.

**NOLIDAE*****Meganola albula* (Denis & Schiffermüller, 1775)**

Sargelai, 13 07 2008, 1 spec.

**ARCTIIDAE*****Parasemia plantaginis* (Linnaeus, 1758)**

Sargelai, 17 06 2007, 31 05 2008, 1 spec.

**ODONATA****COENAGRIONIDAE*****Ischnura pumilio* (Charpentier, 1825)**

Kragai, 2007 08 05, one dead male found in lake Kragai.

**LIBELLULIDAE*****Leucorrhinia pectoralis* (Charpentier, 1825)**

Papušinys, 07 06 2007, < 10 spec.; Praviršulis, 20 06 2008, 1 male.

**GOMPHIDAE*****Ophiogomphus cecilia* (Fourcroy, 1785)**

Liaubarai, 10 06 2008, 1 juv. male; Borkus, 19 06 2008, few males; former peat cutting site, 18 07 2008, 1 female.

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**References**

- Ivinskis P. 1993. *Checklist of Lithuanian Lepidoptera*. Vilnius: Institute of Ecology.
- Ivinskis P., Augustauskas J. 2004. *Lietuvos dieniniai drugiai* [Butterflies of Lithuania]. Kaunas: Lututė.
- Karsholt O. & Nieukerken E.J. van (eds.). 2007. *Lepidoptera, Moths. Fauna Europaea version 1.3*, <http://www.faunaeur.org>.
- Rašomavičius V. (ed.) 2007. *Lietuvos raudonoji knyga. Red Data Book of Lithuania*. Kaunas: Lututė.
- Sargelių bendruomenės centras. Reti drugeliai ir žirgeliai. Available from <http://www.sargelai.org/Gamta/Rarespecies>. Accessed 10 09 2008.

**Retos drugių ir žirgelių rūšys Praviršulio ežero (vidurio Lietuva) apylinkėse,  
užregistruotos 2007–2008 metais***B. GLIWA, D. ŠEŠKAUSKAITĖ***Santrauka**

Straipsnyje pateikiami duomenys apie saugomas ir retas drugių ir žirgelių rūšis, užregistruotas Praviršulio tyrelio botaniniame-zoologiniame draustinyje ir gretimuose miškuose bei pievose. Tyrimai atlikti vykdant Sargelių bendruomenės centro projektus, siekiant skatinti agrarinę aplinkosaugą draustinio prieigose ir kitose biologinės įvairovės atžvilgiu vertingose teritorijose. Duomenys surinkti 2007 ir 2008 metais. Prie kiekvienos rūšies pateikiama radavietė, data, individų skaičius, aprašytos buveinės.

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