

# COLEOPTERA (INSECTA) OF THE ZABAJKAL'SKIJ NATIONAL PARK: 1. MATERIAL COLLECTED BY CZECH BAIKAL EXPEDITION IN 1993

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**Abstract:** A list of 22 beetle families (in which 76 species were identified so far), collected by members of the Baikal '93 expedition, is given. *Pterostichus rhaeticus* Heer (Carabidae), formerly known only from Europe, was recorded for the first time from Siberia.

**Key-words:** Insecta, Coleoptera, faunistics, distribution, East Siberia.

## Introduction

The fauna of many coleopteran families in East Siberia, incl. Lake Baikal area, is still insufficiently known (see Ler 1989, 1992). Below we report on the beetles of the Zabajkal'skij National Park, obtained by Baikal '93 expedition to East Siberia, organized by ÚESS-SPODEK, Praha. The beetles identified below were collected by Jiří Mlíkovský (JM) and Miroslav Šálek (MŠ).

Brief characteristics of the localities are as follows:

1. Svjatoj Nos wetlands: Extensive wetlands, with lakes, marshland, small patches of pine forests, and exposed sandy dwellings. Located at Svjatoj Nos isthmus at NE Baikal, ca. 460 m a.s.l. For a more detailed description see Mlíkovský et al. (1992) and Chytrý and Pešout (1992). Beetles were collected here between early June till late August.
2. Lowland Svjatoj Nos peninsula: Lowland taiga with patches of dry sunny meadows. Located at the border between Svjatoj Nos isthmus and eastern part of Svjatoj Nos peninsula. For a more detailed description see Mlíkovský et al. (1992) and Chytrý and Pešout (1992). Beetles were collected here on 12-15 July 1993.

3. Svjatoj Nos mountains: Svjatoj Nos range at the Svjatoj Nos peninsula, NE Baikal. Beetles were collected at the slopes of the hills and at their top. Biotopes included taiga of various types, and mountain tundra. For a more detailed description see Moložnikov (1974) and Tulochonov and Doržiev (1990). Beetles were collected here on 30 June - 5 July 1993.

Individual beetle families were determined by the following specialists:

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- Zdeněk Černý, Mírovce 15, CZ - 250 63 Mratín, Czech Republic.
- Jan Horák, K hrádku 567, Dubeček, CZ-107 00 Praha 10, Czech Republic.
- Oldřich Hovorka, V zahrádkách 1132, CZ-263 01 Dobříš, Czech Republic.
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- David Král, Department of Systematic Zoology, Charles University, Viničná 7, CZ-120 00 Praha 2, Czech Republic.
- Jan Macek, Uralská 1, CZ-160 00 Praha 6, Czech Republic.
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Specimens are placed in the collections of determinators, most of which will be later forwarded to the National Museum in Praha, Czech Republic. Individuals from the following families were collected, but not determined yet: Staphylinidae, Dermestidae, Coccinellidae, Anthicidae, Tenebrionidae, Chrysomelidae, and Curculionidae.

### Systematic list

#### Carabidae [O. Hovorka, J. Macek and V. Švihla det.]

Genus *Cicindela* was determined by V. Švihla, genus *Carabus* by J. Macek. All other Carabidae were determined by O. Hovorka. Specimens collected by MŠ were caught in pitfall traps, those supplied by JM were caught individually.

*Cicindela* (s.str.) *sylvatica sylvatica* Linnaeus, 1758: Sv. Nos wetlands, VI.1993, JM lgt., 2 ex.; Sv. Nos wetlands, VII.1993, JM lgt., 1 ex. Euro-Siberian element

*Carabus* (*Morphocarabus*) *hummeli hummeli* Fischer, 1823: Sv. Nos lowlands, 12.-15. VII.1993, JM lgt., 2 ex. Euro-Siberian element.

- Carabus (Morphocarabus) aeruginosus aeruginosus* Fischer, 1822: Sv. Nos lowlands, 12.-15.VII.1993, JM lgt., 1 ex. Euro-Siberian element.
- Nebria (Boreonebria) baicalica* Motschulsky, 1844: lowland Sv. Nos peninsula, 12.-15.VII.1993, JM lgt., 2 ex. This species is endemic to the Baikal area (Šilenkov 1975).
- Nebria (Catonebria) nitidula catenulata* Fischer-Waldheim, 1822: Sv. Nos wetlands, VI.-VII.1993, MŠ lgt., 1 ex. Siberian element
- Diacheila arctica* (Gyllenhal, 1810): Sv. Nos wetlands, VII.1993, MŠ lgt., 1 ex. Holarctic element.
- Elaphrus (Neoelaphrus) sibiricus* Motschulsky, 1846: Sv. Nos wetlands, VI.-VII.1993, MŠ lgt., 1 ex. Siberian element.
- Dyschirius globosus* (Herbst, 1784): Sv. Nos wetlands, VI.1993, MŠ lgt., 1 ex. Palearctic element. Distribution in eastern Siberia is not exactly known, because populations in E Asia were recently divided in four closely related, but distinct species (Fedorenko 1991).
- Bembidion (Notaphus) semipunctatus elongatum* R.Sahlberg, 1844: lowland Sv. Nos peninsula, 12.-15.VII.1993, JM lgt., 1 ex.
- Poecilus (Macropoecilus) fortipes* (Chaudoir, 1850): Sv. Nos wetlands, VI.1993, JM lgt., 3 ex.; Sv. Nos wetlands, MŠ lgt., 1 ex.
- Pterostichus (Melanius) rhaeticus* Heer, 1837: Sv. Nos wetlands, VI.-VII.1993, MŠ lgt., 2 ex. Euro-Siberian element. This is first record of the species from Siberia and Asia.
- Pterostichus (Bothriopterus) adstrictus* (Eschscholtz, 1823): Sv. Nos wetlands, VI.-VII.1993, MŠ lgt., 3 ex. Siberian element.
- Sericoda quadripunctata* (De Geer, 1774): Sv. Nos wetlands, VII.1993, MŠ lgt., 1 ex. Holarctic element.
- Euophilus piceus* (Linnaeus, 1758): Sv. Nos wetlands, VII.1993, MŠ lgt., 4 ex. Euro-Siberian element.
- Euophilus thoreyi* (Dejean, 1828): Sv. Nos wetlands, VII.1993, MŠ lgt., 1 ex. Holarctic element.
- Agonum* (s. str.) *séxpunctatum* (Linnaeus, 1758): Sv. Nos wetlands, VI.-VII.1993, MŠ lgt., 9 ex. Euro-Siberian element.
- Calathus (Neocalathus) micropterus* (Duftschmid, 1812): lowland Sv. Nos peninsula, 12.-15.VII.1993, JM lgt., 2 ex.; Sv. Nos wetlands, VII.1993, MŠ lgt., 1 ex. Euro-Siberian element.
- Amara* (s. str.) *communis* (Panzer, 1797): Sv. Nos wetlands, VI.1993, JM lgt., 1 ex. Euro-Siberian element.
- Amara* (s. str.) *coreica* Kolbe: Sv. Nos wetlands, VI.1993, JM lgt., 1 ex. Siberian element.
- Amara* (s. str.) *similata similata* (Gyllenhal, 1810): lowland Sv. Nos peninsula, 12.-15.VII.1993, JM lgt., 1 ex. Euro-Siberian element.
- Amara (Bradytus) aurichalcea* Germar, 1824: Sv. Nos wetlands, VI.-VII.1993, MŠ lgt., 2 ex. Siberian element.

*Curtonotus harpaloides* (Dejean, 1828): Sv. Nos wetlands, VII.1993, MŠ lgt., 1 ex. Siberian element.

*Harpalus* (s. str.) *affinis* (Schrank, 1781): Sv. Nos wetlands, VI.1993, JM lgt., 1 ex. Holarctic element.

*Harpalus* (s. str.) *obesus* Morawitz, 1862: lowland Sv. Nos peninsula, 12.-15.VII.1993, JM lgt., 1 ex. Siberian element.

*Harpalus* (s. str.) *solitarius* Dejean, 1829: Sv. Nos wetlands, VI.-VII.1993, MŠ lgt., 5 ex. Holarctic element.

*Trichocellus cognatus* (Gyllenhal, 1827): Sv. Nos wetlands, VI.1993, MŠ lgt., 1 ex. Holarctic element.

*Philorhizum sigma amurensis* (Reitter, 1887): Sv. Nos wetlands, VII.1993, MŠ lgt., 2 ex. Siberian element.

### Histeridae [O. Kapler det.]

*Atholus duodecimstriatus duodecimstriatus* (Gyllenhal, 1808): Sv. Nos wetlands, VII.1993, MŠ lgt., 1 ex. Euro-Siberian element.

*Saprimus sedakovi* Motschulsky 1860: Sv. Nos wetlands, VII.1993, JM lgt., 2 ex.; Sv. Nos lowlands, 12.-15.VII.1993, JM lgt., 2 ex.; Sv. Nos wetlands, VII.1993, MŠ lgt., 191 ex. Siberian element.

*Saprimus semistriatus* (Scriba, 1790): Sv. Nos wetlands, VII.1993, MŠ lgt., 51 ex. Siberian element.

### Scarabeidae [D. Král det.]

*Trichius fasciatus* (Linnaeus, 1758): lowland Sv. Nos peninsula, 12.-15.VII.1993, JM lgt., 1 ex. Euro-Siberian element.

*Potosia cuprea metallica* (Herbst, 1782): lowland Sv. Nos peninsula, 12.-15.VII.1993, JM lgt., 1 ex.; Sv. Nos wetlands, VII.1993, JM lgt., 1 ex. Euro-Siberian element.

### Buprestidae [S. Bilý det.]

*Melanophila formaneki formaneki* (Jakobson, 1912): Sv. Nos mountains, 30.VI.-3.VII.1993, JM lgt., 1 ex. Euro-Siberian element.

*Anthaxia acutiangula* Motschulsky, 1860: Sv. Nos wetlands, VI.1993, JM lgt., 1 ex. Siberian element.

*Anthaxia quadrioveolata* Solsky, 1871: Sv. Not wetlands, VII.1993, JM lgt., 2 ex.; lowland Sv. Nos peninsula, 12.-15.VII.1993, JM lgt., 5 ex. Siberian element.

### Elateridae [T. Sitek det.]

*Iacon fasciatus* (Linnaeus, 1758): Sv. Nos wetlands, VI.1993, JM lgt., 1 male, 1 female. Euro-Siberian element.

*Iacon conspersus* (Gyllenhal, 1808): Sv. Nos wetlands, VI.1993, JM lgt., 1 ex. Euro-Siberian element.

*Denticollis linearis* (Linnaeus, 1758): Sv. Nos wetlands, VI.1993, JM lgt., 1 ex. Euro-Siberian element.

- Ampedus balteatus* (Linnaeus, 1758): Sv. Nos wetlands, VI.1993, JM lgt., 1 female. Euro-Siberian element.
- Ampedus latiusculus* (Reitter, 1889): Sv. Nos wetlands, VI.1993, JM lgt., 1 female. Euro-Siberian element. New species for the Baikal region.
- Selatosomus melancholicus melancholicus* (Fabricius, 1798): Sv. Nos wetlands, VI.1993, JM lgt., 1 female. Euro-Siberian element.
- Selatosomus gloriosus* (Kishii, 1955): Sv. Nos mountains, 30.VI.-3.VII.1993, JM lgt., 1 male, 1 female. Euro-Siberian element.
- Selatosomus reichardti* (Denisova, 1948): Sv. Nos lowlands, 13.-15.VII.1993, JM lgt., 3 males, 2 females. Siberian element.
- Mosotalesus impressus* (Fabricius, 1792): Sv. Nos mountains, 30.VI.-3.VII.1993, JM lgt., 1 male. Euro-Siberian element.
- Hypoganomorphus laevicollis* (Mannerheim, 1852): Sv. Nos mountains, 30.VI.-3.VII.1993, JM lgt., 1 male. Siberian element.
- Sericus brunneus* (Linnaeus, 1758): Sv. Nos mountains, 30.VI.-3.VII.1993, JM lgt., 1 male. Euro-Siberian element.
- Anostirus castaneus castaneus* (Linnaeus, 1758): Sv. Nos lowlands, 13.-15.VII.1993, JM lgt., 1 female. Euro-Siberian element.
- Lycidae [V. Švihla det.]**
- Dictyoptera aurora* (Herbst, 1784): Sv. Nos mountains, 30.VI.-3.VII.1993, JM lgt., 1 ex. Holarctic element.
- Lygisteris sanguineus* (Linnaeus, 1758): Sv. Nos mountains, 30.VI.-3.VII.1993, JM lgt., 3 ex.; lowland Sv. Nos peninsula, 12.-15.VII.1993, JM lgt., 9 ex., Sv. Nos wetlands, VII.1993, JM lgt., 3 ex. Euro-Siberian element.
- Cantharidae [see Švihla 1995]**
- Cantharis figurata* Mannerheim, 1843
- Podabrus alpinus* (Paykull, 1798)
- Cleridae [V. Švihla det.]**
- Trichodes irtutensis* (Laxmann, 1770): Sv. Nos wetlands, VII.1993, JM lgt., 2 ex. Euro-Siberian element.
- Dasytidae [K. Majer det.]**
- Dasytes niger* (Linnaeus, 1761): Sv. Nos wetlands, VI.1993, JM lgt., 1 male, 1 female. Euro-Siberian element.
- Malachiidae [see Švihla 1995]**
- Apalochrus puncticollis* Wittmer, 1970
- Phalacridae [Z. Švec det.]**
- Olibrus bicolor* (Fabricius, 1792): Sv. Nos wetlands, VII.1993, JM lgt., 2 ex. Holarctic element. This is first record of the species from Buryatia.

### **Mordellidae [J. Horák det.]**

*Mordella holomelaena sibirica* Apfelbeck, 1914: Sv. Nos wetlands, VI.1993, JM lgt., 1 ex. Siberian element.

*Curtimorda maculosa* (Neazen, 1794): Sv. Nos wetlands, VI.1993, JM lgt., 1 ex.; Sv. Nos wetlands, VII.1993, MŠ lgt., 1 ex. Euro-Siberian element.

### **Scraptiidae [J. Horák det.]**

*Anaspis* (s. str.) *frontalis* (Linnaeus, 1758): lowland Sv. Nos peninsula, 12.-15.VII.1993, JM lgt., 1 ex. Euro-Siberian element.

### **Oedemeridae [see Švihla 1995]**

*Ditylus laevis laevis* (Fabricius, 1792)

*Chrysanthia nigricornis* Westhoff, 1881

*Oedemera virescens* (Linnaeus, 1767)

### **Cerambycidae [Z. Černý det.]**

*Rhagium inquisitor* (Linnaeus, 1758): Sv. Nos wetlands, VI.1993, JM lgt., 1 ex. Holarctic element.

*Pachyta quadrimaculata* (Linnaeus, 1758): lowland Sv. Nos peninsula, 12.-15.VII.1993, JM lgt., 1 F. Euro-Siberian element.

*Acmaeops septentrionis* (C.Thomas, 1866): Sv. Nos wetlands, VI.1993, JM lgt., 1 M; Sv. Nos wetlands, VII.1993, JM lgt., 1 M. Euro-Siberian element.

*Gnathacmaeops pratensis* (Laicharting, 1784): Sv. Nos wetlands, VI.1993, JM lgt., 1 ex.; lowland Sv. Nos peninsula, 12.-15.VII.1993, JM lgt., 1 ex. Euro-Siberian element.

*Nivellia sanguinosa* (Gyllenhal, 1827): Sv. Nos wetlands, VI.1993, JM lgt., 1 ex. Euro-Siberian element.

*Judolia longipes* (Gebler, 1832): Sv. Nos mountains, 30.VI.-3.VII.1993, JM lgt., 1 ex. Euro-Siberian element.

*Oedecnema dubia* (Fabricius, 1781): Sv. Nos wetlands, VI.1993, JM lgt., 4 M; lowland Sv. Nos peninsula, 12.-15.VII.1993, JM lgt., 1 M. Siberian element.

*Stemurella melamra* (Linnaeus, 1758): Sv. Nos mountains, 30.VI.-3.VII.1993, JM lgt., 1 F; lowland Sv. Nos peninsula, 12.-15.VII.1993, JM lgt., 1 M. Euro-Siberian element.

*Leptura arcuata* Panzer, 1793: lowland Sv. Nos peninsula, 12.-15.VII.1993, JM lgt., 2 ex. Siberian element.

*Leptura duodecimguttata* Fabricius, 1801: Sv. Nos wetlands, VI.1993, JM lgt., 1 ex.; Sv. Nos mountains, 30.VI.-3.VII.1993, JM lgt., 1 ex. Siberian element.

*Leptura aethiops* Poda, 1761: Sv. Nos wetlands, VI.1993, JM lgt., 3 ex.; lowland Sv. Nos peninsula, 12.-15.VII.1993, JM lgt., 3 M. Euro-Siberian element.

- Anastrangalia sequensi* (Reitter, 1898): Sv. Nos mountains, 30.VI.-3.VII.1993, JM lgt., 2 ex.; lowland Sv. Nos peninsula, 12.-15.VII.1993, JM lgt., 1 M. Siberian element.
- Lepturobosca virens* (Linnaeus, 1758): lowland Sv. Nos peninsula, 12.-15.VII.1993, JM lgt., 3 ex. Euro-Siberian element.
- Clytus arietoides* Reitter, 1899: Sv. Nos wetlands, VI.1993, JM lgt., 1 ex. Siberian element.
- Monocharmus sutor* (Linnaeus, 1758): Sv. Nos wetlands, VI.1993, JM lgt., 1 M; Sv. Nos wetlands, VII.1993, JM lgt., 1 F. Euro-Siberian element.

## Discussion

This is the first contribution to the inventarisation of the beetle fauna in Zabajkal'skij National Park. Overall, 22 families were found, in which 76 species were identified so far (in 15 families). In a similar study performed over many years in Bajkal'skij Reserve at SE Baikal (some 400 km south of Zabajkal'skij National Park), 35 families and 379 species of beetles were found (Belova 1991).

Most of the beetles identified in this paper belong to widely distributed species, which can be regarded as Holarctic (8 species), Euro-Siberian (44), and Siberian (23) elements. Only a single species, *Nebria baicalica* Motschulsky (Carabidae), is endemic to Lake Baikal area.

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