

Results of a faunistic survey of beetles (Coleoptera) in Vrapač National Nature Reserve (Czech Republic, Northern Moravia, Litovelské Pomoraví Protected Landscape Area) in 2009

Výsledky faunistického průzkumu brouků (Coleoptera) NPR Vrapač (Česká republika, severní Morava, CHKO Litovelské Pomoraví) provedeného v roce 2009

Oto NAKLÁDAL

Department of Forest Protection and Game Management, Faculty of Forestry and Wood Sciences, Czech University of Life Sciences Prague, Kamýčká 129,
CZ-165 21 Praha 6 – Suchbátka, Czech Republic; e-mail: nakladal@fld.czu.cz

Faunistics, Coleoptera, *Micropeplus longipennis*, *Symbiotes latus*, *Agnathus decoratus*, Vrapač National Nature Reserve, Litovelské Pomoraví Protected Landscape Area, Czech Republic.

Abstract: A total of 520 species of 57 families were recorded during a survey of beetles (Coleoptera) in the Vrapač National Nature Reserve in 2009. Two of them are protected by law in the Czech Republic – *Carabus scheidleri* Panzer, 1799 (Carabidae) and *Oxythyrea funesta* (Poda, 1761) (Scarabaeidae) and a further 42 are included on the Red list of threatened species of the Czech Republic. The following critically endangered species were recorded: *Micropeplus longipennis* Kraatz, 1859 (Staphylinidae), *Symbiotes latus* Redtenbacher, 1849 (Endomychidae) and *Agnathus decoratus* (Germar, 1818) (Pyrochroidae).

INTRODUCTION

Numerous studies have focused on the flora and fauna of the Litovelské Pomoraví Protected Landscape Area (abbreviated as LP PLA) but beetles remain insufficiently studied, partly because a number of studies were only deposited as manuscripts at the administration of LP PLA but were never formally published.

Among the relatively well-studied groups of beetles are the Carabidae (Divoký 1989, Malohlava 1995, Blahoušek 1997, Tvardík 2000, Nakládal 2003, Dedek 2004, 2006, Holec 2007; Hora 2008; Veselý et al. 2009), the family Silphidae (Kočárek 1997), the Cerambycidae (Černý 1999), and several families of aquatic beetles (Boukal 1995, 1997a, 1997b, Boukal & Trávníček 1995, 1998, Trávníček et al. 1997). Additional data on various beetles can be found in other faunistic inventories and ecological studies (e.g., Bezděčka 2000, Blahut 1986, Horčíčko 1978a,b, 1982, 2002a,b, Hornišer 2000, Jelínek & Kubán 2009, Nakládal 2006, 2008, Růžička & Vávra 1993, Řehounek 1997, Skalický 1987, Tuf 2001). The first records of some species for Moravia or even for the Czech Republic from LP PLA have published by Nakládal & Sörensson (2008) and Nakládal & Průdek (2008).

MATERIAL AND METHODS

The aim of this survey was to record as many species of beetles (Coleoptera) as possible, and hence various collecting methods were utilized, including individual sampling (especially in the riparian zone of the Morava river

and aquatic habitats), beating of trees and bushes, sweeping, pitfall traps, examination of dung and carrion, sifting of organic substrates (especially from anthills and tree hollows and bases), night sampling from trees, and examination of flood debris in the spring. Beetles were also attracted using maturing cheese, fallow deer dung, carrion, rotting fungus, fermenting apples and to light. Pitfall traps (with ethylene glycol to preserve the specimens) were set on 7.vi.–5.vii. and 5.vii.–8.viii.2009. Altogether the site was visited 34 times, on 4.iii., 5.iii., 14.iii., 11.iv., 26.iv., 3.v., 7.v., 9.v., 10.v., 13.v., 14.v., 17.v., 3.vi., 7.vi., 13.vi., 14.vi., 16.vi., 17.vi., 26.vi., 27.vi., 3.vii., 5.vii., 2.viii., 3.viii., 7.viii., 8.viii., 30.viii., 6.ix., 27.ix., 3.x., 4.x., 23.x., 6.xii. and 18.xii.2009.

The nomenclature follows Löbl & Smetana (2003, 2004, 2006, 2007, 2008, 2010) except for Curculionoidea. The system of families in Curculionoidea follows Vorst (2010).

The species within each family are listed alphabetically. All specimens were collected by the author and are deposited in his private collection.

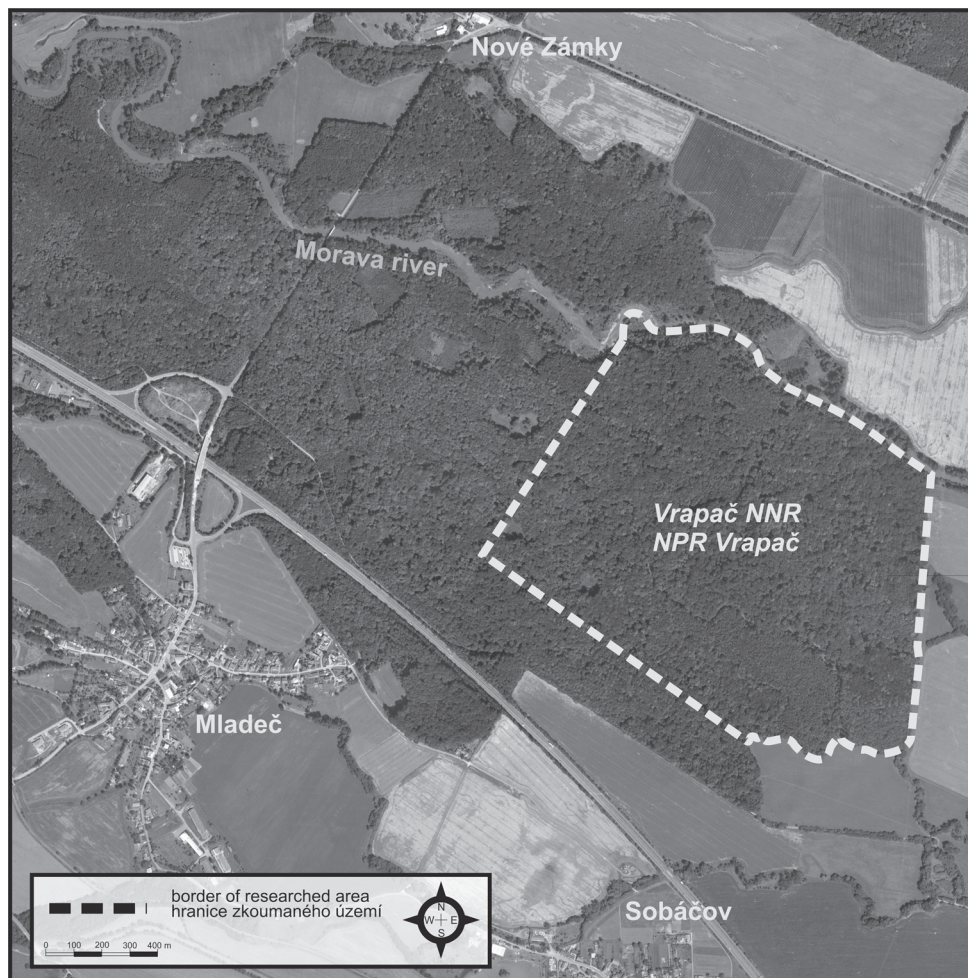


Fig. 1 – Map of Vrapač National Nature Reserve.
Obr. 1 – Mapa národní přírodní rezervace Vrapač.

The Dytiscidae were identified by Jiří Hájek (Praha, Czech Republic), Hydrophilidae by Martin Fikáček (Praha, Czech Republic), Histeridae by Jiří Vávra (Ostrava, Czech Republic), Staphylinidae by Pavel Krásenský (Chomutov, Czech Republic), Buprestidae by Vít Kubáň (Brno, Czech Republic), Byrrhidae by Jan Schneider (Praha, Czech Republic), Throscidae by Jiří Vávra, Elateridae by Bořivoj Zbuzek (Praha, Czech Republic), Cantharidae, Oedemeridae, Melyridae by Vladimír Švihla (Praha, Czech Republic), Dermestidae by Jiří Háva (Únětice u Prahy, Czech Republic), Ptinidae by Petr Zahradník (Trnová u Prahy, Czech Republic), Kateretidae, Nitidulidae and Byturidae by Josef Jelínek (Praha, Czech Republic), Monotomidae, Silvanidae, Laemophloeidae, Cryptophagidae, Erotylidae, Cerylonidae, Corylophidae, Latridiidae, Ciidae, Zopheridae and Salpingidae by Pavel Průdek (Brno, Czech Republic), Coccinellidae by Vladimír Navrátil (Praha, Czech Republic), Melandryidae, Mordellidae, Aderidae, Scaptiidae by Jan Horák (Praha, Czech Republic), Orsodacnidae, Chrysomelidae, Attelabidae, Brentidae and Curculionidae by Jaromír Strejček (Praha, Czech Republic), Curculionidae: Scolytinae by Miloš Knížek (Praha, Czech Republic) and the remaining groups by the author – unless otherwise stated in the Results.

One abbreviation is used in the text: PFT – pitfall trap.

CHARACTERISTICS OF THE AREA

Vrapáč National Nature Reserve is situated in the southern part of North Moravia – approximately 0.5 km north-east of the village of Mladeč (Litovel env.) (see Fig. 1). Geographical coordinates (GPS) are as follows: 49°42'31"N; 17°02'23"E (centroid). The territory studied comprises 80.69 ha., at altitudes of 236–237 m a.s.l. and covers one faunistic square (6268), more precisely a subsquare (6268c) (Pruner & Míka 1996).

The majority of the floodplain area is covered by hardwood forests (association *Querco-Ulmetum*). There are much fewer smaller deciduous trees, lining the banks of the Morava river. These habitats are represented by the association *Salicetum albae* or by the association *Salicetum triandrae*. Only a small part of the studied area consists of open habitats, of the *Caricetum buekii* and *Rorippo-Phalaridetum arundinaceae* associations, or gravel habitats without any vegetation. Other biotopes consist of permanent and numerous temporary water bodies of the *Potametum crispum* and *Callitriche hamulatae-Batrachietum aquatilis* associations.

Two rivers are present, the Morava and Malá Voda, and the channels of both are undisturbed along the entire length of the studied area. Numerous different succession habitats (e.g. swamps, gravel and/or sand banks which are affected by fluctuating water levels and overgrown to varying extents by vegetation) are formed.

RESULTS

Altogether 1812 specimens representing 520 species of 57 families were collected during the study. These are listed below.

Gyrinidae

Orectochilus villosus (O. F. Müller, 1776): 13.vi.2009, 2 spec.

Dytiscidae

Dytiscus marginalis Linnaeus, 1758: 13.vi.2009, 1 spec., Oto Nakládal det.

Hydroporus palustris (Linnaeus, 1761): 13.vi.2009, 2 spec.

Hyphydrus ovatus (Linnaeus, 1761): 7.vi.2009, 2 spec.

Platambus maculatus (Linnaeus, 1758): 13.vi.2009, 1 spec.

Suphrodytes dorsalis (Fabricius, 1787): 13.vi.2009, 1 spec.

Carabidae

Abax parallelepipedus (Piller et Mitterpacher, 1783): 5.vii.–8.viii.2009, 56 spec., PFT; 7.vi.–5.vii.2009, 76 spec., PFT.

Abax parallelus parallelus (Duftschmid, 1812): 5.vii.–8.viii.2009, 20 spec., PFT; 7.vi.–5.vii.2009, 18 spec., PFT.

Acupalpus luteatus (Duftschmid, 1812): 14.iii.2009, 1 spec., in flood debris, Petr Veselý det.

Agonum afrum (Duftschmid, 1812): 17.v.2009, 1 spec., Petr Veselý det.

Agonum angustatum Dejean 1828: 3.viii.2009, 1 spec., Petr Veselý det.

Agonum duftschmidii J. Schmidt, 1994: 3.viii.2009, 1 spec., Petr Veselý det.

Agonum viduum (Panzer, 1796): 7.v.2009, 2 spec., Petr Veselý det.

Amara aulica (Panzer, 1796): 13.vi.2009, 1 spec.; 27.vi.2009, 1 spec.

Amara gebleri Dejean, 1831: 5.vii.2009, 1 spec.

Amara ovata (Fabricius, 1792): 13.vi.2009, 1 spec.; 7.vi.–5.vii.2009, 2 spec.

Amara plebeja (Gyllenhal, 1810): 7.vi.2009, 1 spec., Petr Veselý det.

Anisodactylus binotatus (Fabricius, 1787): 17.v.2009, 1 spec., Petr Veselý det.

Badister lacertosus Sturm, 1815: 7.vi.–5.vii.2009, 1 spec.

Bembidion articulatum (Panzer, 1796): 17.v.2009, 5 spec.

Bembidion biguttatum (Fabricius, 1779): 14.iii.2009, 1 spec.; 17.v.2009, 1 spec.; 14.vi.2009, 1 spec.; 14.vi.2009, 1 spec., Petr Veselý det.

Bembidion dentellum (Thunberg, 1787): 7.vi.2009, 1 spec.; 14.vi.2009, 1 spec.

Bembidion lampros (Herbst, 1784): 17.v.2009, 1 spec.; 14.vi.2009, 2 spec.; 7.vi.–5.vii.2009, 2 spec.

Bembidion schueppelii Dejean, 1831: 14.vi.2009, 3 spec.; 3.viii.2009, 3 spec.

Bembidion semipunctatum (Donovan, 1806): 17.v.2009, 1 spec.; 7.vi.2009, 1 spec.; 3.viii.2009, 1 spec.

Bembidion tetracolum Say, 1823: 3.viii.2009, 1 spec.

Bembidion tibiale (Duftschmid, 1812): 7.viii.2009, 2 spec., Petr Veselý det.

Carabus coriaceus Linnaeus, 1758: 7.vi.–5.vii.2009, 1 spec., PFT.

Carabus granulatus Linnaeus, 1758: 14.iii.2009, 1 spec., in flood debris; 7.vi.–5.vii.2009, 1 spec., PFT.

Carabus scheidleri Panzer, 1799: 5.vii.–8.viii.2009, 11 spec., PFT; 7.vi.–5.vii.2009, 2 spec., PFT.

Carabus violaceus Linnaeus, 1758: 13.v.2009, 1 spec.; 5.vii.–8.viii.2009, 2 spec., PFT; 7.vi.–5.vii.2009, 2 spec., PFT.

Clivina collaris (Herbst, 1784): 17.v.2009, 2 spec.

Clivina fossor fossor (Linnaeus, 1758): 17.v.2009, 2 spec.

Cychrus caraboides (Linnaeus, 1758): 5.vii.–8.viii.2009, 1 spec., PFT.

Demetrius atricapillus (Linnaeus, 1758): 3.vii.2009, 1 spec.

Dyschirius globosus (Herbst, 1784): 14.vi.2009, 1 spec., Petr Veselý det.; 3.viii.2009, 2 spec., Petr Veselý det.

Dyschirius tristis Stephens, 1827: 7.vi.2009, 6 spec., Petr Veselý det.

Elaphrus cupreus Duftschmidt, 1812: 14.vi.2009, 1 spec.; 2.viii.2009, 1 spec.; 8.viii.2009, 1 spec.

Elaphrus riparius (Linnaeus, 1758): 17.v.2009, 2 spec.; 7.vi.2009, 1 spec.

Europhilus fuliginosum (Panzer, 1809): 14.vi.2009, 1 spec., Petr Veselý det.

Europhilus micans (Nicolai, 1822): 17.v.2009, 2 spec., Petr Veselý det.; 14.vi.2009, 3 spec., Petr Veselý det.

Harpalus latus (Linnaeus, 1758): 7.vi.–5.vii.2009, 1 spec., Petr Veselý det., PFT

- Harpalus progrediens* Schauberger, 1922: 7.vi.–5.vii.2009, 3 spec., Petr Veselý det., PFT.
Harpalus rufipes (De Geer, 1774): 5.vii.–8.viii.2009, 8 spec., PFT; 7.vi.–5.vii.2009, 19 spec., PFT.
Leistus ferrugineus (Linnaeus, 1758): 14.vi.2009, 1 spec.; 5.vii.–8.viii.2009, 1 spec.
Leistus piceus piceus Frölich, 1799: 14.vi.2009, 2 spec.
Leistus rufomarginatus (Duftschmid, 1812): 26.vi.2009, 1 spec.; 7.vi.–5.vii.2009, 4 spec.
Loricera pilicornis (Fabricius, 1775): 14.vi.2009, 1 spec.; 5.vii.–8.viii.2009, 1 spec.
Nebria brevicollis (Fabricius, 1792): 14.vi.2009, 1 spec.
Notiophilus biguttatus (Fabricius, 1779): 14.vi.2009, 1 spec.
Notiophilus palustris (Duftschmid, 1812): 5.vii.2009, 1 spec.
Oodes helopioides (Fabricius, 1792): 17.v.2009, 1 spec.
Paranchus albipes (Fabricius, 1796): 3.viii.2009, 1 spec.
Patrobus atrofufus (Stroem, 1768): 14.vi.2009, 1 spec.
Platynus assimilis (Paykull, 1790): 7.vi.–5.vii.2009, 19 spec., PFT.
Pterostichus melanarius (Illiger, 1798): 5.vii.–8.viii.2009, 110 spec., PFT; 7.vi.–5.vii.2009, 129 spec., PFT.
Pterostichus niger (Schaller, 1783): 5.vii.–8.viii.2009, 30 spec., PFT; 7.vi.–5.vii.2009, 8 spec., PFT.
Pterostichus oblongopunctatus (Fabricius, 1787): 7.vi.–5.vii.2009, 2 spec., PFT.
Pterostichus ovoideus (Sturm, 1824): 5.vii.–8.viii.2009, 2 spec.; 7.vi.–5.vii.2009, 3 spec.
Pterostichus strenuus (Panzer, 1796): 14.vi.2009, 1 spec.
Pterostichus vernalis (Panzer, 1796): 7.vi.2009, 1 spec.
Stenolophus mixtus (Herbst, 1784): 7.vi.2009, 1 spec.
Syntomus truncatellus (Linnaeus, 1761): 4.iii.2009, 4 spec., in flood debris, Petr Veselý det.
Tachys micros (Fischer von Waldheim, 1828): 14.iii.2009, 2 spec., in flood debris; 9.v.2009, 1 spec.; 17.v.2009, 1 spec.
Trechus quadristriatus (Schrank, 1781): 7.vi.–5.vii.2009, 1 spec., Petr Veselý det., PFT.

Hydrophilidae

- Cercyon pygmaeus* (Illiger, 1801): 5.vii.2009, 1 spec.
Cercyon bifenestratus Küster, 1851: 3.viii.2009, 1 spec.
Cercyon marinus C. G. Thomson, 1853: 3.viii.2009, 1 spec.
Cryptopleurum minutum (Fabricius, 1775): 4.x.2009, 1 spec., sifted from various organic matter.
Megasternum concinnum (Marsham, 1802): 14.iii.2009, 2 spec., in flood debris.

Histeridae

- Abraeus perpusillus* (Marsham, 1802): 3.vii.2009, 1 spec.
Aeletes atomarius (Aubé, 1842): 3.vii.2009, 1 spec.
Dendrophilus punctatus punctatus (Herbst, 1792): 26.vi.2009, 1 spec.; 3.vii.2009, 7 spec.
Margarinotus brunneus (Fabricius, 1775): 26.iv.2009, 1 spec., on carrion.
Margarinotus striola succicola (C. G. Thomson, 1862): 4.x.2009, 1 spec., sifted from various organic matter.

Ptiliidae

- Acrotrichis dispar* (Matthews, 1865): 4.x.2009, 3 spec., sifted from various organic matter.
Acrotrichis fascicularis (Herbst, 1793): 9.v.2009, 1 spec.
Acrotrichis grandicollis (Mannerheim, 1844): 5.vii.2009, 3 spec.; 4.x.2009, 2 spec., sifted from various organic matter.
Ptenidium formicetorum Kraatz, 1851: 26.iv.2009, 1 spec., sifted from various organic matter.
Ptenidium gressneri Erichson, 1845: 26.iv.2009, 1 spec., sifted from various organic matter.
Ptenidium longicorne Fuss, 1868: 14.iii.2009, 5 spec., in flood debris; 26.iv.2009, 1 spec., sifted from various organic matter; 9.v.2009, 2 spec.; 3.vii.2009, 2 spec.
Ptenidium reitteri Flach, 1887: 26.iv.2009, 1 spec., sifted from various organic matter; 9.v.2009, 7 spec.
Pteryx suturalis (Heer, 1841): 26.iv.2009, 1 spec., sifted from various organic matter.
Smicrus filicornis (Fairmaire et Laboulbene, 1855): 9.v.2009, 1 spec.

Leiodidae

- Catops fuliginosus* Erichson, 1837: 14.vi.2009, 1 spec.; 4.x.2009, 1 spec., sifted from various organic matter.
Catops grandicollis Erichson, 1837: 4.x.2009, 3 spec., ripe cheese; 23.x.2009, 2 spec., ripe cheese.
Catops neglectus Kraatz, 1852: 4.x.2009, 1 spec., ripe cheese; 23.x.2009, 2 spec., ripe cheese.
Catops picipes (Fabricius, 1787): 4.x.2009, 1 spec., ripe cheese; 23.x.2009, 2 spec., ripe cheese.
Catops tristis tristis (Panzer, 1794): 23.x.2009, 1 spec., ripe cheese.
Fissocatops westii Krogerus, 1931: 5.vii.–8.viii.2009, 4 spec., PFT; 7.vi.–5.vii.2009, 3 spec., PFT.
Ptomaphagus sericatus sericatus (Chaudoir, 1845): 4.x.2009, 1 spec., ripe cheese; 5.vii.–8.viii.2009, 1 spec., PFT.
Ptomaphagus varicornis (Rosenhauer, 1847): 7.vi.2009, 1 spec.
Sciodrepoides fumatus (Spence, 1813): 4.x.2009, 1 spec., sifted from various organic matter.

Silphidae

- Necrodes littoralis* (Linnaeus, 1758): 26.iv.2009, 1 spec., on carrion.
Nicrophorus vespillo (Linnaeus, 1758): 26.iv.2009, 1 spec., on carrion.
Oiceoptoma thoracicum (Linnaeus, 1758): 17.v.2009, 1 spec.
Phosphuga atrata (Linnaeus, 1758): 5.vii.–8.viii.2009, 50 spec., PFT; 7.vi.–5.vii.2009, 24 spec., PFT.
Thanatophilus rugosus (Linnaeus, 1758): 17.v.2009, 1 spec.
Thanatophilus sinuatus (Fabricius, 1775): 17.v.2009, 1 spec.

Staphylinidae

- Acrotona fungi* (Gravenhorst, 1806): 14.iii.2009, 2 spec., in flood debris; 27.vi.2009, 1 spec.; 6.ix.2009, 4 spec., on decaying apples; 4.x.2009, 1 spec., sifted from various organic matter.
- Acrotona negligens* (Mulsant et Rey, 1873): 14.iii.2009, 1 spec., in flood debris.
- Acrulia inflata* (Gyllenhal, 1813): 5.vii.2009.
- Agaricochara latissima* (Stephens, 1832): 30.viii.2009, 2 spec.
- Aleochara brevipennis* Gravenhorst, 1806: 17.v.2009, 1 spec.
- Aleochara curtula* (Goeze, 1777): 26.iv.2009, 1 spec., on carrion.
- Aleochara ruficornis* Gravenhorst, 1802: 14.vi.2009, 1 spec.
- Aloconota insecta* (Thomson, 1856): 14.iii.2009, 1 spec.
- Anotylus tetracarinatus* (Block, 1799): 14.iii.2009, 2 spec., in flood debris.
- Anthobium atrocephalum* (Gyllenhal, 1827): 7.vi.–5.vii.2009, 1 spec.
- Anthophagus angusticollis angusticollis* (Mannerheim, 1830): 7.vi.2009, 1 spec.; 13.vi.2009, 1 spec.
- Atheta britanniae* Bernhauer et Scheerpeltz, 1926: 14.vi.2009, 1 spec.
- Atheta coriaria* (Kraatz, 1856): 6.ix.2009, 2 spec., on decaying apples.
- Atheta crassicornis* (Fabricius, 1793): 14.vi.2009, 1 spec.; 27.vi.2009, 1 spec.; 2.viii.2009, 1 spec.; 6.ix.2009, 3 spec., on decaying apples; 4.x.2009, 1 spec., sifted from various organic matter.
- Atheta dadopora* Thomson, 1867: 27.vi.2009, 1 spec.; 6.ix.2009, 1 spec., on decaying apples; 4.x.2009, 3 spec., sifted from various organic matter.
- Atheta laticollis* (Stephens, 1832): 6.ix.2009, 1 spec., on decaying apples.
- Atheta liturata* (Stephens, 1832): 27.vi.2009, 1 spec.
- Atheta longicornis* (Gravenhorst, 1802): 4.x.2009, 1 spec.
- Atheta oblita* (Erichson, 1839): 6.ix.2009, 3 spec., on decaying apples.
- Atheta pallidicornis* (Thomson, 1856): 7.vi.2009, 1 spec.
- Atheta ravilla* (Erichson, 1839): 5.vii.2009, 1 spec.
- Atheta subtilis* (Scriba, 1866): 27.vi.2009, 1 spec.
- Autalia rivularis* (Gravenhorst, 1802): 4.x.2009, 1 spec., sifted from various organic matter.
- Bisnius fimetarius* (Gravenhorst, 1802): 5.vii.2009, 1 spec.; 4.x.2009, 1 spec., sifted from various organic matter.
- Carpelimus gracilis* (Mannerheim, 1830): 9.v.2009, 1 spec.
- Carphacis striatus* (Olivier, 1795): 2.viii.2009, 2 spec.
- Creophilus maxillosus* (Linnaeus, 1758): 26.iv.2009, 1 spec., on carrion, Oto Nakládal det.
- Cypha longicornis* (Paykull, 1800): 14.iii.2009, 1 spec., in flood debris.
- Cyphea curtula* (Erichson, 1837): 14.vi.2009, 1 spec.
- Dinaraea aequata* (Erichson, 1837): 7.vi.2009, 1 spec.
- Drusilla canaliculata* (Fabricius, 1787): 7.vi.–5.vii.2009, 1 spec.; 7.vi.–5.vii.2009, 1 spec., PFT, Oto Nakládal det.
- Euryusa sinuata* Erichson, 1837: 5.vii.2009, 1 spec.
- Eusphalerum semicoleopratum* (Panzer, 1795): 3.v.2009, 5 spec.
- Gabrius breviventer* (Sperk, 1835): 14.iii.2009, 1 spec., in flood debris; 3.viii.2009, 1 spec.
- Geostiba circellaris* (Gravenhorst, 1806): 14.iii.2009, 4 spec., in flood debris.

Gyrophæna affinis Mannerheim, 1830: 13.vi.2009, 1 spec.
Gyrophæna fasciata (Marsham, 1802): 30.viii.2009, 2 spec.
Gyrophæna gentilis Erichson, 1839: 30.viii.2009, 1 spec.
Gyrophæna joyi joyi Wendeler, 1924: 30.viii.2009, 1 spec.
Gyrophæna joyioides Wüsthoff, 1937: 27.vi.2009, 1 spec.
Gyrophæna manca Erichson, 1839: 9.v.2009, 1 spec.
Gyrophæna strictula Erichson, 1839: 13.vi.2009, 1 spec.
Ischnopoda leucopus (Marsham, 1802): 3.viii.2009, 1 spec.
Lathrobium brunripes (Fabricius, 1793): 14.vi.2009, 1 spec.
Leptusa pulchella (Mannerheim, 1830): 5.vii.2009, 1 spec.
Medon ripicola (Kraatz, 1854): 17.v.2009, 1 spec.
Megarthritis depressus (Paykull, 1789): 27.vi.2009, 2 spec.
Meotica filiformis (Motschulsky, 1860): 14.iii.2009, 2 spec., in flood debris.
Micropeplus longipennis Kraatz, 1859: 14.iii.2009, 1 spec., in flood debris.
Ochtheophilus omalinus (Erichson, 1840): 9.v.2009, 2 spec.
Omalius rivulare (Paykull, 1789): 17.v.2009, 1 spec.; 6.ix.2009, 13 spec., on decaying apples.
Othius punctulatus (Goeze, 1777): 7.vi.–5.vii.2009, 2 spec., PFT.
Oxypoda acuminata (Stephens, 1832): 17.v.2009, 1 spec.
Oxypoda alternans (Gravenhorst, 1802): 14.vi.2009, 1 spec.
Oxyporus maxillosus Fabricius, 1793: 30.viii.2009, 1 spec.
Philonthus addendus Sharp, 1867: 2.viii.2009, 2 spec.; 4.x.2009, 3 spec.
Philonthus decorus (Gravenhorst, 1802): 5.vii.–8.viii.2009, 4 spec.; 7.vi.–5.vii.2009, 44 spec., Oto Nakládal det.
Philonthus fumarius (Gravenhorst, 1806): 13.vi.2009, 1 spec.; 14.vi.2009, 1 spec.
Philonthus rotundicollis (Ménétriés, 1832): 14.vi.2009, 1 spec.
Philonthus tenuicornis Mulsant et Rey, 1853: 4.x.2009, 4 spec., sifted from various organic matter.
Phloeocharis subtilissima Mannerheim, 1830: 17.v.2009, 2 spec.
Plataræa dubiosa (G. Benick, 1935): 9.v.2009, 1 spec.
Platystethus cornutus cornutus (Gravenhorst, 1802): 7.vi.2009, 1 spec.
Proteinus atomarius Erichson, 1840: 9.v.2009, 1 spec.; 3.vii.2009, 1 spec.; 4.x.2009, 1 spec., sifted from various organic matter
Quedius cinctus (Paykull, 1790): 4.x.2009, 1 spec., sifted from various organic matter.
Quedius cruentus (Olivier, 1795): 6.ix.2009, 5 spec., on decaying apples.
Quedius fuliginosus (Gravenhorst, 1802): 7.vi.–5.vii.2009, 3 spec.
Scaphidium quadrimaculatum Olivier, 1790: 30.viii.2009, 1 spec., Oto Nakládal det.
Scaphisoma agaricinum (Linnaeus, 1758): 13.vi.2009, 1 spec.; 4.x.2009, 1 spec., ripe cheese.
Sepedophilus marshami (Stephens, 1832): 14.vi.2009, 1 spec.
Stenus boops boops Ljungh, 1810: 17.v.2009, 1 spec.; 3.viii.2009, 4 spec.
Stenus flavipes flavipes Stephens, 1833: 13.vi.2009, 1 spec.
Tachinus rufipes (Linnaeus, 1758): 7.vi.2009, 1 spec.; 5.vii.2009, 1 spec.; 5.vii.–8.viii.2009, 1 spec., PFT.
Tachyporus chrysomelinus (Linnaeus, 1758): 17.v.2009, 1 spec.
Tachyporus nitidulus (Fabricius, 1781): 27.vi.2009, 1 spec.

Tasgius melanarius melanarius (Heer, 1839): 7.vi.–5.vii.2009, 2 spec.
Thamiaraea cinnamomea (Gravenhorst, 1802): 6.ix.2009, 6 spec., on decaying apples.
Xantholinus tricolor (Fabricius, 1787): 7.vi.–5.vii.2009, 1 spec., PFT.
Zyras humeralis (Gravenhorst, 1802): 14.vi.2009, 1 spec.
Zyras lugens (Gravenhorst, 1802): 26.vi.2009, 1 spec.; 5.vii.2009, 1 spec.

Lucanidae

Platycerus caraboides (Linnaeus, 1758): 7.vi.–5.vii.2009, 3 spec.

Geotrupidae

Anoplotrupes stercorosus (Hartmann in L. G. Scriba, 1791): 5.vii.–8.viii.2009, 2 spec., PFT;
7.vi.–5.vii.2009, 1 spec., PFT.

Scarabaeidae

Aphodius rufipes (Linnaeus, 1758): 5.vii.2009, 1 spec., Jan Schneider det.
Cetonia aurata (Linnaeus, 1761): 10.v.2009, 1 spec.
Onthophagus coenobita (Herbst, 1783): 26.iv.2009, 1 spec., on carrion, Jan Schneider det.;
9.v.2009, 1 spec., Jan Schneider det.; 4.x.2009, 1 spec., sifted from various organic matter,
Jan Schneider det.
Onthophagus verticicornis (Laicharting, 1781): 9.v.2009, 3 spec., Jan Schneider det.;
5.vii.2009, 1 spec., Jan Schneider det.
Oxythyrea funesta (Poda, 1761): 17.v.2009, 1 spec.; 7.vi.2009, 1 spec.
Phyllopertha horticola (Linnaeus, 1758): 7.vi.2009, 1 spec.
Protaetia cuprea obscura (Andersch, 1797): 3.v.2009, 1 spec.; 10.v.2009, 1 spec.
Serica brunnea (Linnaeus, 1758): 3.vii.2009, 1 spec.
Valgus hemipterus (Linnaeus, 1758): 9.v.2009, 1 spec.

Scirtidae

Cyphon ruficeps Tournier, 1868: 9.v.2009, 1 spec.

Buprestidae

Agrilus betuleti (Ratzeburg, 1837): 13.vi.2009, 1 spec.
Agrilus convexicollis L. Redtenbacher, 1849: 14.vi.2009, 1 spec.
Agrilus laticornis (Illiger, 1803): 17.v.2009, 2 spec.; 13.vi.2009, 1 spec.; 14.vi.2009, 2 spec.;
3.vii.2009, 1 spec.
Agrilus obscuricollis Kiesenwetter, 1857: 7.vi.2009, 1 spec., coll. NM Praha.
Dicerca alni (Fischer von Waldheim, 1824): 2009, only galleries with emergence hole on
Alnus – the species *D. berolinensis* (Herbst, 1779), with similar galleries and possible
development on *Alnus*, has never been recorded in LP PLA, unlike *D. alni*.
Trachys minuta (Linnaeus, 1758): 14.vi.2009, 1 spec.

Byrrhidae

Cytilus sericeus (Forster, 1771): 4.x.2009, 1 spec., sifted from various organic matter.

Chaetophora spinosa (Rossi, 1794): 14.iii.2009, 1 spec., in flood debris, coll. Jan Schneider (Praha).

Eucnemidae

Eucnemis capucina Ahrens, 1812: 14.vi.2009, 1 spec.; 26.vi.2009, 1 spec., PFT set in tree hollow (on tree base) of huge old *Fraxinus excelsior*.

Microrhagus lepidus (Rosenhauer, 1847): 14.vi.2009, 1 spec., Jiří Vávra det.

Throscidae

Trixagus carinifrons (Bonvouloir, 1859): 2.viii.2009, 1 spec.

Trixagus dermestoides (Linnaeus, 1767): 13.vi.2009, 1 spec.; 14.vi.2009, 1 spec.

Elateridae

Adrastus pallens (Fabricius, 1792): 2.viii.2009, 3 spec.

Adrastus rachifer (Geoffroy, 1785): 13.vi.2009, 2 spec.; 14.vi.2009, 3 spec.; 3.vii.2009, 5 spec.

Agriotes acuminatus (Stephens, 1830): 9.v.2009, 2 spec.; 10.v.2009, 3 spec.; 17.v.2009, 1 spec.

Agriotes obscurus (Linnaeus, 1758): 9.v.2009, 1 spec.; 7.vi.2009, 1 spec.

Agriotes pilosellus (Schönherr, 1817): 9.v.2009, 1 spec.; 17.v.2009, 1 spec.; 7.vi.2009, 2 spec.

Agriotes sputator (Linnaeus, 1758): 9.v.2009, 2 spec.

Agrypnus murinus (Linnaeus, 1758): 3.vii.2009, 1 spec.

Ampedus sanguinolentus (Schrank, 1776): 9.v.2009, 2 spec.

Anostirus castaneus (Linnaeus, 1758): 9.v.2009, 1 spec.

Anostirus purpureus (Poda, 1761): 3.v.2009, 1 spec.; 9.v.2009, 1 spec.; 17.v.2009, 1 spec.

Athous bicolor (Goeze, 1777): 3.vii.2009, 1 spec.; 5.vii.–8.viii.2009, 1 spec., PFT; 7.vi.–5.vii.2009, 1 spec., PFT, Oto Nakládal det.

Athous haemorrhoidalis (Fabricius, 1801): 3.v.2009, 9 spec.; 9.v.2009, 1 spec.

Athous subfuscus (O. F. Müller, 1767): 13.vi.2009, 1 spec.

Athous vittatus (Fabricius, 1792): 3.v.2009, 6 spec.; 9.v.2009, 3 spec.; 14.vi.2009, 1 spec.

Dalopius marginatus (Linnaeus, 1758): 3.v.2009, 1 spec.; 17.v.2009, 1 spec.

Denticollis linearis (Linnaeus, 1758): 7.vi.2009, 1 spec.

Hemicrepidius hirtus (Herbst, 1784): 27.vi.2009, 1 spec.; 3.vii.2009, 1 spec.

Hemicrepidius niger (Linnaeus, 1758): 10.v.2009, 4 spec.; 7.vi.2009, 1 spec.; 13.vi.2009, 1 spec.; 3.vii.2009, 1 spec.

Limonius poneli Leseigneur et Mertlik, 2007: 3.v.2009, 1 spec.; 9.v.2009, 5 spec.; 10.v.2009, 1 spec.; 14.vi.2009, 4 spec.; 27.vi.2009, 3 spec.

Melanotus castanipes (Paykull, 1800): 9.v.2009, 3 spec.

Stenagostus rhombeus (Olivier, 1790): 3.vii.2009, 1 spec.
Synaptus filiformis (Fabricius, 1781): 9.v.2009, 1 spec.; 9.v.2009, 1 spec.

Lampyridae

Lamprohiza splendidula (Linnaeus, 1767): 26.vi.2009, 4 spec.
Phosphaenus hemipterus Geoffroy, 1762: 7.vi.–5.vii.2009, 1 spec.

Cantharidae

Cantharis fusca Linnaeus, 1758: 10.v.2009, 1 spec.
Cantharis lateralis Linnaeus, 1758: 7.vi.2009, 1 spec.
Cantharis livida Linnaeus, 1758: 3.v.2009, 1 spec.; 10.v.2009, 4 spec.
Cantharis nigricans (O. F. Müller, 1776): 10.v.2009, 1 spec.; 13.vi.2009, 2 spec.; 14.vi.2009, 1 spec.
Cantharis pellucida Fabricius, 1792: 3.v.2009, 4 spec.; 10.v.2009, 2 spec.
Cantharis rufa Linnaeus, 1758: 10.v.2009, 1 spec.; 3.vii.2009, 2 spec.
Malthinus flaveolus (Herbst, 1786): 7.vi.2009, 1 spec.
Malthinus frontalis (Marsham, 1802): 14.vi.2009, 1 spec.
Malthodes marginatus (Latreille, 1806): 17.v.2009, 1 spec.
Metacantharis clypeata (Illiger, 1798): 10.v.2009, 1 spec.
Podabrus alpinus (Paykull, 1798): 10.v.2009, 1 spec.; 7.vi.2009, 1 spec.
Rhagonycha fulva (Scopoli, 1763): 3.vii.2009, 1 spec.
Rhagonycha gallica Pic, 1923: 14.vi.2009, 1 spec.; 3.vii.2009, 1 spec.
Rhagonycha lutea (O. F. Müller, 1764): 14.vi.2009, 5 spec.
Rhagonycha nigriventris Motschulsky, 1860: 14.vi.2009, 1 spec.

Dermestidae

Dermestes frischii Kugelann, 1792: 17.v.2009, 1 spec.
Trinodes hirtus (Fabricius, 1781): 14.vi.2009, 1 spec., Oto Nakládal det.

Ptinidae

Dorcatoma dresdensis Herbst, 1792: 2009, 7 spec., reared from polypore mushroom
Hemicoelus fulvicornis (Sturm, 1837): 13.vi.2009, 1 spec.; 5.vii.2009, 1 spec.
Hemicoelus rufipennis (Duftschmid, 1825): 14.vi.2009, 1 spec.
Hyperisus plumbeum (Illiger, 1801): 9.v.2009, 1 spec.
Oligomerus brunneus (Olivier, 1790): 3.vii.2009, 1 spec.
Ptilinus pectinicornis (Linnaeus, 1758): 7.vi.2009, 1 spec.
Ptinomorphus imperialis (Linnaeus, 1767): 17.v.2009, 1 spec.; 14.vi.2009, 1 spec.
Ptinus rufipes Olivier, 1790: 14.vi.2009, 5 spec.; 3.vii.2009, 1 spec.
Xyletinus ater (Creutzer, 1796): 3.vii.2009, 1 spec.

Cleridae

Korynetes sp.: 3.vii.2009, 1 spec. It seems to be *K. caeruleus* (De Geer, 1775) but the specimens may be *K. ruficornis* (Sturm, 1837) species.

Melyridae

Axinotarsus marginalis (Laporte de Castelnau, 1840): 7.vi.2009, 1 spec.

Axinotarsus ruficollis (Olivier, 1790): 5.vii.2009, 4 spec.

Cordylepherus viridis (Fabricius, 1787): 7.vi.2009, 1 spec.

Malachius bipustulatus (Linnaeus, 1758): 3.v.2009, 2 spec.

Kateretidae

Kateretes pusillus (Thunberg, 1794): 9.v.2009, 1 spec.

Nitidulidae

Cychramus luteus (Fabricius, 1787): 9.v.2009, 5 spec.

Cychramus variegatus (Herbst, 1792): 9.v.2009, 1 spec.

Epuraea aestiva (Linnaeus, 1758): 3.vii.2009, 4 spec.

Epuraea longula Erichson, 1845: 9.v.2009, 2 spec.

Epuraea melanocephala (Marsham, 1802): 3.vii.2009, 3 spec.

Epuraea unicolor (Olivier, 1790): 6.ix.2009, 1 spec., on decaying apples.

Epuraea variegata (Herbst, 1793): 13.vi.2009, 2 spec.

Glischrochilus quadrisignatus (Say, 1835): 6.ix.2009, 6 spec., on decaying apples.

Meligethes aeneus (Fabricius, 1775): 2.viii.2009, 3 spec.

Meligethes difficilis (Heer, 1841): 5.vii.2009, 1 spec.; 2.viii.2009, 1 spec.

Meligethes egenus Erichson, 1845: 7.vi.2009, 2 spec.

Meligethes sulcatus C. Brisout de Barneville, 1863: 16.vi.2009, 2 spec.; 3.vii.2009, 1 spec.

Meligethes viridescens (Fabricius, 1787): 3.vii.2009, 1 spec.

Meligethes denticulatus (Heer, 1841): 7.vi.2009, 1 spec.

Meligethes haemorrhoidalis Förster, 1849: 3.vii.2009, 1 spec.

Omosita depressa (Linnaeus, 1758): 4.x.2009, 3 spec., sifted from various organic matter.

Pocadius ferrugineus (Fabricius, 1775): 9.v.2009, 1 spec.; 5.vii.2009, 5 spec.; 30.viii.2009, 1 spec.

Soronia grisea (Linnaeus, 1758): 14.vi.2009, 1 spec.; 6.ix.2009, 1 spec., on decaying apples.

Monotomidae

Rhizophagus dispar (Paykull, 1800): 5.vii.2009, 1 spec.

Rhizophagus perforatus Erichson, 1845: 9.v.2009, 1 spec.; 7.vi.2009, 1 spec.; 27.vi.2009, 1 spec.

Rhizophagus picipes (Olivier, 1790): 9.v.2009, 1 spec.

Silvanidae

Silvanus bidentatus (Fabricius, 1792): 17.v.2009, 1 spec.

Uleiota planatus (Linnaeus, 1761): 17.v.2009, 1 spec.

Laemophloeidae

Cryptolestes duplicatus (Waltl, 1839): 9.v.2009, 1 spec.

Notolaemus castaneus (Erichson, 1845): 27.vi.2009, 1 spec.; 3.vii.2009, 1 spec.

Cryptophagidae

Atomaria analis Erichson, 1846: 3.vii.2009, 1 spec.

Atomaria atricapilla Stephens, 1830: 9.v.2009, 1 spec.; 2.viii.2009, 1 spec.

Atomaria basalis Erichson, 1846: 3.vii.2009, 1 spec.

Atomaria fuscata (Schönherr, 1808): 14.iii.2009, 1 spec., in flood debris; 9.v.2009, 2 spec.; 14.vi.2009, 1 spec.; 3.vii.2009, 3 spec.; 2.viii.2009, 1 spec.; 4.x.2009, 1 spec.

Atomaria linearis Stephens, 1830: 14.iii.2009, 1 spec., in flood debris; 9.v.2009, 2 spec.; 13.vi.2009, 1 spec.; 27.vi.2009, 1 spec.; 3.vii.2009, 1 spec.

Atomaria nigrirostris Stephens, 1830: 9.v.2009, 1 spec.; 3.vii.2009, 1 spec.

Cryptophagus distinguendus Sturm, 1845: 26.vi.2009, 1 spec.

Cryptophagus pallidus Sturm, 1845: 4.x.2009, 5 spec., ripe cheese; 23.x.2009, 1 spec., ripe cheese.

Cryptophagus parallelus C. Brisout de Barneville, 1863: 3.vii.2009, 1 spec.

Cryptophagus punctipennis C. N. F. Brisout de Barneville, 1863: 3.vii.2009, 2 spec.; 30.viii.2009, 2 spec.; 4.x.2009, 1 spec., ripe cheese.

Cryptophagus reflexus Rey, 1889: 4.x.2009, 1 spec., ripe cheese; 23.x.2009, 1 spec., ripe cheese.

Cryptophagus uncinatus Stephens, 1830: 6.ix.2009, 1 spec., on decaying apples.

Ephistemus reitteri Casey, 1900: 9.v.2009, 1 spec.; 4.x.2009, 4 spec., sifted from various organic matter.

Micrambe woodroffei Johnson, 2007: 14.vi.2009, 1 spec.

Ootypus globosus (Waltl, 1838): 14.iii.2009, 1 spec., in flood debris.

Erotylidae

Dacne bipustulata (Thunberg, 1781): 5.vii.2009, 5 spec.

Triplax rufipes (Fabricius, 1787): 3.vii.2009, 10 spec.

Byturidae

Byturus ochraceus (Scriba, 1790): 7.vi.2009, 2 spec.; 13.vi.2009, 1 spec.; 2009, 2 spec.

Byturus tomentosus (De Geer, 1774): 9.v.2009, 1 spec.

Cerylonidae

Cerylon fagi C. Brisout de Barneville, 1867: 4.x.2009, 1 spec., sifted from various organic matter.

Cerylon ferrugineum Stephens, 1830: 4.x.2009, 2 spec., sifted from various organic matter.

Cerylon histeroides (Fabricius, 1792): 26.vi.2009, 1 spec.; 3.vii.2009, 2 spec.

Endomychidae

Endomychus coccineus (Linnaeus, 1758): 5.vii.2009, 3 spec.

Mycetina cruciata (Schaller, 1783): 26.vi.2009, 4 spec.

Symbiotes latus Redtenbacher, 1849: 26.vi.2009, 1 spec., in dry wood debris inside tree hollow (on tree base) of huge old *Fraxinus excelsior*, Pavel Průdek det.

Coccinellidae

Adalia decempunctata (Linnaeus, 1758): 3.v.2009, 1 spec.; 17.v.2009, 1 spec.

Calvia decemguttata (Linnaeus, 1767): 3.v.2009, 1 spec.

Ceratomegilla undecimnotata (D. H. Schneider, 1792): 7.vi.2009, 1 spec.

Coccinella septempunctata septempunctata Linnaeus, 1758: 3.v.2009, 1 spec.

Exochomus quadripustulatus (Linnaeus, 1758): 17.v.2009, 1 spec.; 14.vi.2009, 1 spec.

Hippodamia tredecimpunctata (Linnaeus, 1758): 3.viii.2009, 1 spec.

Hyperaspis concolor (Suffrian, 1843): 17.v.2009, 1 spec.; 3.vii.2009, 1 spec.

Propylea quatuordecimpunctata (Linnaeus, 1758): 3.v.2009, 6 spec.

Psyllobora vigintiduopunctata (Linnaeus, 1758): 3.v.2009, 1 spec.; 30.viii.2009, 1 spec.

Stethorus punctillum (Weise, 1891): 9.v.2009, 1 spec.

Corylophidae

Corylophus cassidoides (Marsham, 1802): 14.iii.2009, 3 spec., in flood debris; 9.v.2009, 2 spec.

Orthoperus brunnipes (Gyllenhal, 1808): 9.v.2009, 1 spec.

Orthoperus corticalis (Redtenbacher, 1845): 9.v.2009, 1 spec.

Sericoderus lateralis (Gyllenhal, 1827): 9.v.2009, 1 spec.; 6.ix.2009, 1 spec., on decaying apples.

Latridiidae

Cartodere nodifer (Westwood, 1839): 14.vi.2009, 1 spec.

Corticicara gibbosa (Herbst, 1793): 9.v.2009, 1 spec.; 13.vi.2009, 1 spec.; 14.vi.2009, 1 spec.; 3.vii.2009, 1 spec.; 2.viii.2009, 1 spec.; 4.x.2009, 2 spec., sifted from various organic matter.

Melanophthalma transversalis (Gyllenhal, 1827): 13.vi.2009, 2 spec.

Stephostethus angusticollis (Gyllenhal, 1827): 9.v.2009, 1 spec.

Mycetophagidae

Litargus connexus (Geoffroy, 1785): 5.vii.2009, 2 spec.

Triphyllus bicolor (Fabricius, 1777): 5.vii.2009, 2 spec.

Ciidae

Cis boleti (Scopoli, 1763): 7.vi.2009, 1 spec.

Cis castaneus (Herbst, 1793): 2009, 7 spec. (reared from hard polypore).
Cis micans (Fabricius, 1792): 17.v.2009, 2 spec.; 7.vi.2009, 1 spec.; 14.vi.2009, 1 spec.
Octotemnus glabriculus (Gyllenhal, 1827): 9.v.2009, 1 spec.
Orthocis alni (Gyllenhal, 1813): 14.vi.2009, 1 spec.
Sulcacis fronticornis (Panzer, 1805): 17.v.2009, 4 spec.

Tetratomidae

Tetratoma ancora Fabricius, 1790: 5.vii.2009, 4 spec.

Melandryidae

Anisoxya fuscula (Illiger, 1798): 13.vi.2009, 1 spec.
Conopalpus testaceus (Olivier, 1790): 14.vi.2009, 2 spec.
Melandrya barbata (Fabricius, 1787): 9.v.2009, 1 spec., beaten from roughly 5 year old windthrown *Tilia cordata* trunk (approximately 30 cm in diameter) propped against living tree, in semishaded habitat.
Orchesia minor Walker, 1837: 14.vi.2009, 6 spec.
Orchesia undulata Kraatz, 1853: 14.vi.2009, 3 spec.

Mordellidae

Mordella brachyura brachyura Mulsant, 1856: 7.vi.2009, 7 spec.; 14.vi.2009, 1 spec.; 2.viii.2009, 7 spec.
Mordella holomelaena holomelaena Apfelbeck, 1914: 17.v.2009, 2 spec.
Mordellistena bicoloripilosa Ermisch, 1967: 2009, 1 spec.
Mordellistena humeralis (Fabricius, 1758): 2.viii.2009, 1 spec.
Mordellistena neuwaldeggiana (Panzer, 1796): 2.viii.2009, 4 spec.
Mordellistena variegata (Fabricius, 1798): 7.vi.2009, 2 spec.; 2.viii.2009, 1 spec.
Mordellistena inexpectata Ermisch, 1967: 13.vi.2009, 1 spec.
Mordellochroa abdominalis (Fabricius, 1775): 7.vi.2009, 4 spec.
Tomoxia bucephala Costa, 1854: 14.vi.2009, 1 spec.
Variimorda briantea (Comolli, 1837): 3.viii.2009, 1 spec.

Zopheridae

Bitoma crenata (Fabricius, 1775): 17.v.2009, 1 spec.

Tenebrionidae

Corticeus unicolor Piller et Mitterpacher, 1783: 7.vi.2009, 1 spec.; 13.vi.2009, 1 spec.
Diaperis boleti (Linnaeus, 1758): 30.viii.2009, 1 spec.
Lagria atripes Mulsant et Guillebeau, 1855: 14.vi.2009, 2 spec.; 27.vi.2009, 1 spec.; 3.vii.2009, 1 spec., all Vladimír Švihla det.
Mycetochara linearis (Illiger, 1794): 17.v.2009, 3 spec., Jiří Vávra det.
Stenomax aeneus Scopoli, 1763: 10.v.2009, 1 spec.; 7.vi.–5.vii.2009, 1 spec., PFT.

Oedemeridae

Oedemera femorata (Scopoli, 1763): 13.vi.2009, 1 spec.

Oedemera virescens (Linnaeus, 1767): 17.v.2009, 2 spec.; 7.vi.2009, 2 spec.

Pyrochroidae

Agnathus decoratus (Germar, 1818): 9.v.2009, 8 spec.; 17.v.2009, 1 spec., on trees fallen to the river, the specimens were collected on trunks above the water level.

Pyrochroa coccinea (Linnaeus, 1760): 9.v.2009, 1 spec.; 13.vi.2009, 1 spec.

Pyrochroa serraticornis serraticornis (Scopoli, 1763): 3.v.2009, 1 spec.; 9.v.2009, 3 spec.

Schizotus pectinicornis (Linnaeus, 1758): 11.iv.2009, 1 spec.; 9.v.2009, 1 spec.

Salpingidae

Lissodema cursor (Gyllenhal, 1813): 3.vii.2009, 3 spec.

Lissodema denticolle (Gyllenhal, 1813): 3.vii.2009, 2 spec.

Salpingus planirostris (Fabricius, 1787): 14.vi.2009, 3 spec.

Vincenzellus ruficollis (Panzer, 1794): 26.vi.2009, 1 spec.; 5.vii.2009, 2 spec.

Anthicidae

Notoxus monoceros (Linnaeus, 1760): 9.v.2009, 4 spec.

Aderidae

Phytobaenus amabilis R. F. Sahlberg, 1834: 2.viii.2009, 1 spec.

Scraptiidae

Anaspis brunnipes Mulsant, 1856: 7.vi.2009, 1 spec.

Anaspis flava (Linnaeus, 1758): 2009, 1 spec.

Anaspis frontalis (Linnaeus, 1758): 3.v.2009, 3 spec.; 17.v.2009, 1 spec.; 7.vi.2009, 1 spec.; 14.vi.2009, 2 spec.; 2.viii.2009, 1 spec.

Anaspis marginicollis Lindberg, 1925: 17.v.2009, 1 spec.; 26.vi.2009, 1 spec.

Anaspis palpalis (Gerhardt, 1876): 7.vi.2009, 2 spec.

Anaspis rufilabris (Gyllenhal, 1827): 2.viii.2009, 1 spec.

Cerambycidae

Agapanthia villosoviridescens (De Geer, 1775): 9.v.2009, 1 spec.; 7.vi.2009, 1 spec.

Alosterna tabacicolor tabacicolor (De Geer, 1775): 9.v.2009, 2 spec.; 7.vi.2009, 1 spec.

Anaglyptus mysticus (Linnaeus, 1758): 3.v.2009, 1 spec.; 9.v.2009, 1 spec.

Anoplodera sexguttata (Fabricius, 1775): 7.vi.2009, 5 spec.

Chlorophorus figuratus (Scopoli, 1763): 7.vi.2009, 1 spec.

Clytus arietis arietis (Linnaeus, 1758): 10.v.2009, 1 spec.
Dinoptera collaris (Linnaeus, 1758): 10.v.2009, 1 spec.; 7.vi.2009, 1 spec.
Exocentrus lusitanus (Linnaeus, 1767): 7.vi.2009, 1 spec.; 14.vi.2009, 4 spec.; 3.vii.2009, 2 spec.
Grammoptera ruficornis (Fabricius, 1781): 3.v.2009, 4 spec.; 10.v.2009, 1 spec.; 7.vi.2009, 1 spec.
Grammoptera ustulata (Schaller, 1783): 9.v.2009, 2 spec.
Leiopus linnei Wallin, Nylander et Kvamme, 2009: 9.v.2009, 1 spec.; 10.v.2009, 1 spec.; 7.vi.2009, 1 spec.
Leptura aethiops Poda, 1761: 7.vi.2009, 1 spec.
Leptura annularis annularis Fabricius, 1801: 7.vi.2009, 2 spec.; 2009, 1 spec.
Leptura quadrifasciata quadrifasciata Linnaeus, 1758: 3.viii.2009, 1 spec.
Mesosa nebulosa (Fabricius, 1781): 9.v.2009, 1 spec.
Oplosia cinerea (Mulsant, 1839): 9.v.2009, 2 spec.
Pachytodes cerambyciformis (Schränk, 1781): 17.v.2009, 2 spec.
Phytoecia cylindrica (Linnaeus, 1758): 9.v.2009, 2 spec.; 17.v.2009, 2 spec.; 13.vi.2009, 1 spec.
Pidonia lurida (Fabricius, 1792): 9.v.2009, 1 spec.; 17.v.2009, 2 spec.; 7.vi.2009, 1 spec.
Poecilium alni alni (Linnaeus, 1767): 10.v.2009, 1 spec.
Pogonocherus hispidus (Linnaeus, 1758): 10.v.2009, 1 spec.; 14.vi.2009, 2 spec.
Prionus coriarius (Linnaeus, 1758): 3.viii.2009, 1 dead spec.
Pseudovadonia livida livida (Fabricius, 1777): 27.vi.2009, 1 spec.
Rhagium mordax (De Geer, 1775): 17.v.2009, 1 spec.
Rutpela maculata maculata Poda von Neuhaus, 1761: 7.vi.2009, 2 spec.
Saperda octopunctata (Scopoli, 1772): 2009, only galleries on thick dead branch of old *Ulmus* spp. living on sunny place.
Stenocorus meridianus (Linnaeus, 1758): 17.v.2009, 1 spec.; 13.vi.2009, 1 spec.
Stenostola dubia (Laicharting, 1784): 3.v.2009, 4 spec.; 9.v.2009, 1 spec.
Stenostola ferrea ferrea (Schränk, 1776): 9.v.2009, 1 spec.
Stenurella melanura (Linnaeus, 1758): 7.vi.2009, 1 spec.; 27.vi.2009, 1 spec.
Stictoleptura maculicornis maculicornis (De Geer, 1775): 7.vi.2009, 2 spec.
Tetrops praeustus praeustus (Linnaeus, 1758): 10.v.2009, 1 spec.; 14.vi.2009, 2 spec.
Tetrops starkii Chevrolat, 1859: 14.vi.2009, 1 spec.; 27.vi.2009, 1 spec.

Orsodaenidae

Orsodacne cerasi (Linnaeus, 1758): 3.v.2009, 12 spec.

Chrysomelidae

Aphthona ovata Foudras, 1859: 3.viii.2009, 1 spec.
Aphthona venustula (Kutschera, 1861): 14.vi.2009, 1 spec.
Bruchidius varius (Olivier, 1795): 3.v.2009, 1 spec.
Cassida denticollis Suffrian, 1844: 7.vi.2009, 1 ex; 13.vi.2009, 1 spec.
Cassida rubiginosa rubiginosa O. F. Müller, 1776: 7.vi.2009, 1 spec.; 13.vi.2009, 1 spec.

Cassida sanguinosa Suffrian, 1844: 7.vi.2009, 1 spec.
Cassida vibex Linnaeus, 1767: 13.vi.2009, 1 spec.
Chaetocnema concinna (Marsham, 1802): 2.viii.2009, 2 spec.
Chaetocnema picipes Stephens, 1831: 2.viii.2009, 1 spec.
Chrysolina oricalcia (O. F. Müller, 1776): 3.vii.2009, 1 spec.
Chrysolina varians (Schaller, 1783): 13.vi.2009, 1 spec.; 5.vii.2009, 1 spec.; 2.viii.2009, 2 spec.
Chrysomela populi Linnaeus, 1758: 13.vi.2009, 1 spec.
Chrysomela vigintipunctata vigintipunctata (Scopoli, 1763): 9.v.2009, 1 spec.
Clytra laeviuscula Ratzeburg, 1837: 17.v.2009, 1 spec.; 7.vi.2009, 1 spec.
Crepidodera aurata (Marsham, 1802): 2009, 1 spec.
Cryptocephalus moraei (Linnaeus, 1758): 2.viii.2009, 1 spec.
Cryptocephalus pusillus Fabricius, 1777: 5.vii.2009, 1 spec.
Cryptocephalus querceti Suffrian, 1848: 2.viii.2009, 1 spec.
Cryptocephalus transiens Franz, 1949: 2009, 1 spec.
Gastrophysa viridula viridula (De Geer, 1775): 13.vi.2009, 1 spec.; 2009, 1 spec.
Gonioctena linnaeana linnaeana (Schrank, 1781): 17.v.2009, 1 spec.; 7.vi.2009, 7 spec.
Hermaphysa mercurialis (Fabricius, 1792): 7.vi.2009, 1 spec.; 3.vii.2009, 1 spec.
Labidostomis longimana (Linnaeus, 1760): 27.vi.2009, 1 spec.
Lilioceris lili (Scopoli, 1763): 13.vi.2009, 2 spec.
Longitarsus brunneus (Duftschmid, 1825): 13.vi.2009, 1 spec.
Longitarsus luridus luridus (Scopoli, 1763): 13.vi.2009, 1 spec.; 3.viii.2009, 1 spec.; 30.viii.2009, 1 spec.
Longitarsus lycopi (Foudras, 1860): 3.v.2009, 1 spec.
Longitarsus pulmonariae Weise, 1893: 13.vi.2009, 1 spec.; 2.viii.2009, 1 spec.
Neocrepidodera ferruginea (Scopoli, 1763): 3.vii.2009, 1 spec.; 2009, 1 spec.
Oomorphus concolor (Sturm, 1807): 7.vi.2009, 1 spec.
Oulema gallaeciana Heyden, 1870: 2.viii.2009, 2 spec.; 3.viii.2009, 1 spec.
Oulema melanopus (Linnaeus, 1758): 2.viii.2009, 2 spec.
Phaedon cochleariae cochleariae (Fabricius, 1792): 17.v.2009, 1 spec.
Phyllotreta nemorum (Linnaeus, 1758): 9.v.2009, 1 spec.
Phyllotreta nigripes nigripes (Fabricius, 1775): 2.viii.2009, 1 spec.
Phyllotreta ochripes (Curtis, 1837): 5.vii.2009, 1 spec.
Phyllotreta vittula (L. Redtenbacher, 1849): 2.viii.2009, 1 spec.; 6.ix.2009, 1 spec., on decaying apples; 4.x.2009, 1 spec., sifted from various organic matter.
Psylliodes napi (Fabricius, 1792): 7.vi.2009, 1 spec.; 3.viii.2009, 1 spec.; 30.viii.2009, 1 spec.; 2009, 1 spec.
Psylliodes picina (Marsham, 1802): 2.viii.2009, 2 spec.

Anthribidae

Anthribus nebulosus Forster, 1771: 3.v.2009, 1 spec.; 17.v.2009, 1 spec.
Dissoleucas niveirostris (Fabricius, 1798): 9.v.2009, 1 spec.; 5.vii.2009, 1 spec.
Enedreytes sepicola (Fabricius, 1792): 3.vii.2009, 1 spec.

Attelabidae

- Apoderus coryli* (Linnaeus, 1758): 27.vi.2009, 1 spec.
Attelabus nitens (Scopoli, 1763): 9.v.2009, 1 spec.
Byctiscus populi (Linnaeus, 1758): 9.v.2009, 1 spec.
Caenorhinus aequatus (Linnaeus, 1767): 9.v.2009, 1 spec.
Pselaphorhynchites nanus (Paykull, 1792): 9.v.2009, 1 spec.

Brentidae

- Betulapion simile* (W. Kirby, 1811): 2.viii.2009, 2 spec.
Ceratapion onopordi (W. Kirby, 1808): 7.vi.2009, 1 spec.; 2009, 1 spec.
Kalcapion pallipes (W. Kirby, 1808): 2.viii.2009, 7 spec.
Protapion apricans (Herbst, 1797): 9.v.2009, 1 spec.
Protapion fulvipes (Geoffroy, 1785): 2.viii.2009, 1 spec.
Squamapion elongatum (Germar, 1817): 14.iii.2009, 1 spec., in flood debris; 13.vi.2009, 1 spec.
Taeniapion urticarium (Herbst, 1784): 9.v.2009, 1 spec.; 14.vi.2009, 1 spec.; 2.viii.2009, 1 spec.

Curculionidae

- Acalles camelus* (Fabricius, 1792): 26.vi.2009, 1 spec.; 5.vii.2009, 1 spec.; 7.vi.–5.vii.2009, 2 spec., PFT.
Acalles fallax Boheman, 1844: 7.vi.–5.vii.2009, 1 spec., PFT.
Alophus triguttatus vau (Schrank, 1781): 2009, 1 spec.
Archarius pyrrhoceras (Marsham, 1802): 3.v.2009, 3 spec.; 14.vi.2009, 4 spec.
Baris artemisiae (Herbst, 1795): 9.v.2009, 1 spec.
Barynotus obscurus (Fabricius, 1775): 7.vi.–5.vii.2009, 1 spec., PFT.
Barypeithes chevrolati (Boheman, 1843): 2009, 1 spec.
Ceutorhynchus floralis (Herbst, 1795): 9.v.2009, 2 spec.
Ceutorhynchus scrobicollis Neresheimer et Wagner, 1924: 14.vi.2009, 1 spec.
Cionus longicollis montanus Wingelmüller, 1914: 7.vi.2009, 1 spec.
Coeliastes lamii (Fabricius, 1792): 9.v.2009, 1 spec.
Coeliodes ruber (Marsham, 1802): 9.v.2009, 1 spec.
Cotaster uncipes (Boheman, 1838): 4.x.2009, 1 spec., sifted from various organic matter.
Curculio glandium Marsham, 1802: 3.v.2009, 3 spec.; 17.v.2009, 2 spec.; 14.vi.2009, 3 spec.; 27.vi.2009, 1 spec.
Curculio nucum Linnaeus, 1758: 3.v.2009, 1 spec.; 17.v.2009, 1 spec.
Dorytomus dejeani Faust, 1882: 7.vi.2009, 1 spec.
Dorytomus taeniatus (Fabricius, 1781): 7.vi.2009, 1 spec.
Eusomus ovulum Germar, 1824: 2009, 1 spec.
Larinus turbinatus Gyllenhal, 1835: 7.vi.2009, 1 spec.
Leiosoma deflexum (Panzer, 1795): 7.vi.–5.vii.2009, 5 spec.
Liophloeus lentus Germar, 1824: 9.v.2009, 3 spec.; 2009, 1 spec.

Lymantor coryli (Perris, 1853): 9.v.2009, 1 spec.; 5.vii.2009, 1 spec.
Magdalis armigera (Geoffroy, 1785): 17.v.2009, 1 spec.; 14.vi.2009, 1 spec.
Nedus quadrimaculatus (Linnaeus, 1758): 2.viii.2009, 1 spec.
Notaphytobius granatus (Gyllenhal, 1836): 9.v.2009, 1 spec.
Notaris scirpi (Fabricius, 1792): 9.v.2009, 1 spec.
Orchestes avellanae (Donovan, 1797): 9.v.2009, 2 spec.
Orchestes testaceus (Müller, 1776): 9.v.2009, 2 spec.
Phyllobius argentatus (Linnaeus, 1758): 7.vi.–5.vii.2009, 1 spec.; 2009, 2 spec.
Phyllobius glaucus (Scopoli, 1763): 3.v.2009, 1 spec.
Phyllobius maculicornis Germar, 1824: 3.v.2009, 1 spec.; 17.v.2009, 1 spec.
Phyllobius oblongus (Linnaeus, 1758): 3.v.2009, 1 spec.
Phyllobius pomaceus Gyllenhal, 1834: 2009, 1 spec.
Phyllobius vespertinus (Fabricius, 1792): 3.v.2009, 1 spec.
Platypus cylindrus (Fabricius, 1792): 27.ix.2009, 2 spec.
Polydrusus mollis (Ström, 1768): 7.vi.2009, 1 spec.
Polydrusus sericeus (Schaller, 1783): 7.vi.2009, 1 spec.; 2009, 1 spec.
Poophagus sisymbrii (Fabricius, 1777): 17.v.2009, 1 spec.
Rhinocyllus conicus (Frölich, 1792): 7.vi.2009, 1 spec.
Rhinusa bipustulata (Rossi, 1792): 7.vi.2009, 2 spec.
Rhynchaenus populicola Silfverberg, 1977: 9.v.2009, 1 spec.
Rhynchaenus salicis (Linnaeus, 1758): 2.viii.2009, 1 spec.
Sciaphilus asperatus (Bonsdorff, 1785): 7.vi.2009, 1 spec.; 13.vi.2009, 2 spec.; 3.vii.2009, 2 spec.; 5.vii.–8.viii.2009, 1 spec., PFT.
Scolytus intricatus (Ratzeburg, 1837): 14.vi.2009, 1 dead spec.
Scolytus mali (Bechstein, 1805): 2009, only galleries, Oto Nakládal det.
Scolytus rugulosus (P. W. J. Müller, 1818): 3.vii.2009, 1 spec.
Sitona humeralis Stephens, 1831: 30.viii.2009, 1 spec.
Sitona lepidus Gyllenhal, 1834: 3.vii.2009, 1 spec.
Sitona lineatus (Linnaeus, 1758): 13.vi.2009, 1 spec.
Tanymecus palliatus (Fabricius, 1787): 17.v.2009, 1 spec.; 13.vi.2009, 1 spec.; 27.vi.2009, 2 spec.
Trachodes hispidus (Linnaeus, 1758): 14.vi.2009, 9 spec.; 3.vii.2009, 1 spec.; 7.vi.–5.vii.2009, 1 spec.
Tropiphorus elevatus (Herbst, 1795): 7.vi.–5.vii.2009, 1 spec., PFT.
Xyleborus dispar (Fabricius, 1792): 9.v.2009, 1 spec.
Xyleborus dryographus (Ratzeburg, 1837): 7.vi.2009, 1 spec.
Xyleborus monographus (Fabricius, 1792): 9.v.2009, 1 spec.

DISCUSSION

The survey recorded 520 species from 57 families in Vrapáč National Nature Reserve. Two of the recorded species are protected by law in the Czech Republic: *Carabus scheidleri* (Carabidae) and *Oxythyrea funesta* (Scarabaeidae), both of which are categorised as threatened species. 42 additional species are also included in the Red list, including the critically endangered *Micropeplus longipennis* (Staphylinidae), *Symbiotes latus* (Endomychidae) and

Agnathus decoratus (Pyrochroidae), and the endangered *Carphacis striatus*, *Xantholinus tricolor* (Staphylinidae), *Chaetophora spinosa* (Byrrhidae), *Eucnemis capucina*, *Microrhagus lepidus* (Eucnemidae), *Stenagostus rhombeus* (Elateridae), *Melandrya barbata* (Melandryidae), *Phytobaenus amabilis* (Aderidae), *Bruchidius varius*, *Cryptocephalus pusillus*, *Gonioctena linnaeana linnaeana*, *Longitarsus brunneus*, *Oomorphus concolor* (Chrysomelidae), and the near threatened *Harpalus progrediens* (Carabidae), *Adrastus rachifer*, *Ampedus sanguinolentus* (Elateridae), *Saperda octopunctata* (Cerambycidae), *Enedreytes sepicola* (Anthribidae), *Acalles camelus*, *Acalles fallax*, *Cotaster unciipes*, *Neophytobius granatus*, *Trachodes hispidus* (Curculionidae), and the vulnerable *Acupalpus luteatus* (Carabidae), *Aeletes atomarius* (Histeridae), *Cyphea curtula*, *Euryusa sinuata*, *Ochtheophilus omalinus*, *Thamiaraea cinnamomea* (Staphylinidae), *Onthophagus verticicornis* (Scarabaeidae), *Agrilus betuleti*, *Agrilus convexicollis* (Buprestidae), *Phosphaenus hemipterus* (Lampyridae), *Notolaemus castaneus* (Laemophloeidae), *Endomychus coccineus* (Endomychidae), *Triphyllus bicolor* (Mycetophagidae), *Anisoxya fuscula*, *Conopalpus testaceus* (Melandryidae) and *Poophagus sisymbrii* (Curculionidae).

ACKNOWLEDGEMENTS. Thanks are due to Václav Polášek, employee of the administration of the Litovelské Pomoraví Protected Landscape Area, for his kind help with collecting permits and assistance with fieldwork. I am obliged to all those who identified beetles of particular families. This paper was written in the framework of the research project NAZV QH1136 and NAZV QH91097.

REFERENCES

- BEZDĚČKA P. 2000: Zpráva o výsledcích zoologického inventarizačního průzkumu provedeného v roce 2000 na území NPP Třesín v CHKO Litovelské Pomoraví. [Report on the results of a faunistic inventory made in 2000 in the Třesín National Nature Monument in the Litovelské Pomoraví Protected Landscape Area]. Unpublished manuscript. Deposited in: Administration of the Litovelské Pomoraví PLA, Litovel, 52 pp. (in Czech).
- BLAHOUSEK O. 1997: Příspěvek k poznání ekologie střevlíkovitých lužního lesa v CHKO Litovelské Pomoraví pomocí metody ethylenglykolových a formalinových pastí (Col., Carabidae). [Contribution to the knowledge of the ecology of ground beetles (Col., Carabidae) of the floodplain forest in the Litovelské Pomoraví Protected Landscape Area using pitfall traps baited by ethylenglycol and formaldehyde]. Unpublished diploma thesis. Deposited in: Faculty of Science, Palacký University Olomouc, 97 pp. (in Czech).
- BLAHUT P. 1986: Faunisticko-ekologická studie tracheat hrabanky listnatého lesa. [A faunistic and ecological study of the Tracheata of forest litter in a deciduous forest]. Unpublished diploma thesis. Deposited in: Department of Zoology, Faculty of Science, Palacký University Olomouc, 66 pp. (in Czech).
- BOUKAL M. & TRÁVNÍČEK D. 1995: Faunistic Records from the Czech Republic – 24. Coleoptera: Dytiscidae, Hydraenidae, Hydrophilidae, Georissidae, Silvanidae. *Klapalekiana* **31**: 65–68.
- BOUKAL M. & TRÁVNÍČEK D. 1998: New records of Coleoptera (Haliplidae, Hydrophilidae, Byrrhidae) from Slovakia and Moravia. *Biologia*, **53**: 663–664.
- BOUKAL M. 1995: Faunisticko ekologický výzkum vybraných čeledí brouků mokřadů CHKO Litovelské Pomoraví. [A faunistic and ecological study of selected beetle families in wetland areas in the Litovelské Pomoraví Protected Landscape Area]. Unpublished manuscript. Deposited in: Administration of the Litovelské Pomoraví PLA, Litovel, 13 pp. (in Czech).
- BOUKAL M. 1997a: Zhodnocení měnicího se složení druhů vodních (s.l.) coleopter mokřadů CHKO Litovelské Pomoraví po umělem vytvoření nových biotopů. [Evaluation of changes in aquatic beetle (s.l.) communities in wetland areas in the Litovelské Pomoraví Protected Landscape Area after the creation of new artificial biotopes]. Unpublished manuscript. Deposited in: Administration of the Litovelské Pomoraví PLA, Litovel, 7 pp. (in Czech).
- BOUKAL M. 1997b: Dosud známé lokality Cercyon (Paracycreon) laminatus a Cryptopleurum subtile v České a Slovenské Republice a poznámky k ekologii těchto druhů (Coleoptera: Hydrophilidae: Sphaeridinae). (The localities of Cercyon (Paracycreon) laminatus and Cryptopleurum subtile hitherto known in the Czech and Slovak Republic with remarks on their ecology (Coleoptera: Hydrophilidae: Sphaeridinae)). *Klapalekiana* **33**: 143–149 (in Czech, English summary).

- ČERNÝ Z. 1999: *Cerambycidae CHKO Litovelské Pomoraví*. [*Cerambycidae (Coleoptera) of Litovelské Pomoraví Protected Landscape Area*]. Unpublished manuscript. Deposited in: Administration of the Litovelské Pomoraví PLA, Litovel, 6 pp. (in Czech).
- DEDEK P. 2004: *Vliv mýcení lužního lesa na střevlíkovité brouky (Coleoptera: Carabidae)*. [*Effect of clearcut logging in a floodplain forest on the ground beetles (Coleoptera: Carabidae)*]. Unpublished bachelor thesis, Department of Ecology, Faculty of Science, Palacký University Olomouc, 41 pp. (in Czech).
- DEDEK P. 2006: *Ecology of carabid beetles (Coleoptera: Carabidae) in floodplain forest conditions*. Diploma thesis. Deposited in: Department of Ecology, Faculty of Science, Palacký University Olomouc, 64 pp.
- DIVOKÝ V. 1989: *Příspěvek k poznání fauny střevlíkovitých (Col., Carabidae) listnatých lesů navrhované chráněné krajinné oblasti Litovelské Pomoraví*. [*Contribution to the knowledge of the fauna of ground beetles of deciduous forests in the suggested Protected Landscape Area of Litovelské Pomoraví*]. Unpublished diploma thesis. Deposited in: Faculty of Science, Palacký University Olomouc, 129 pp. (in Czech).
- HOLEC V. 2007: *Střevlíci (Coleoptera, Carabidae) a okrajový efekt v transektu: lužní les – mýtina*. [*Ground beetles (Coleoptera: Carabidae) and ecotone in line transect: floodplain forest – clearcut*]. Unpublished diploma thesis. Deposited in: Department of Zoology and Anthropology, Faculty of Science, Palacký University Olomouc, 66 pp.
- HORA P. 2008: *Distribuce střevlíkovitých (Coleoptera: Carabidae) na lesním ekotonu*. [*Distribution of ground beetles (Coleoptera: Carabidae) on forest ecotone*]. Unpublished bachelor thesis. Deposited in: Department of Ecology and Environmental Sciences, Faculty of Science, Palacký University Olomouc, 35 pp.
- HORČÍČKO I. 1978a: *Zpráva o výskytu brouků v lužních lesích v okolí Střeň*. [*Report on the occurrence of beetle in floodplain forests in the environs of the Střeň village*]. Unpublished manuscript. Deposited in: Administration of the Litovelské Pomoraví PLA, Litovel, 8 pp. (in Czech).
- HORČÍČKO I. 1978b: *Zpráva o výskytu brouků v lužních lesích okolo Mladče*. [*Report on the occurrence of beetles in floodplain forests in the environs of the Mladěč village*]. Unpublished manuscript. Deposited in: Administration of the Litovelské Pomoraví PLA, Litovel, 7 pp. (in Czech).
- HORČÍČKO I. 1982: *Inventarizační průzkum Třesína*. [*Inventory study of the Třesín hill*]. Unpublished manuscript. Deposited in: Administration of the Litovelské Pomoraví PLA, Litovel, 9 pp. (un-paginated, in Czech).
- HORČÍČKO I. 2002a: Dominance of beetle families and species recorded in a floodplain forest ecotone. *Acta Universitatis Palackianae Olomouensis, Facultas Rerum Naturalium, Biologica* **39–40**: 41–64.
- HORČÍČKO I. 2002b: Stability of beetle occurrence inside floodplain forest. *Acta Universitatis Palackianae Olomouensis, Facultas Rerum Naturalium, Biologica* **39–40**: 65–79.
- HORNÍŠER I. 2000: *Roháč velký (Lucanus cervus L.) v CHKO Litovelské Pomoraví*. [*Stag-beetle (Lucanus cervus L.) in the Litovelské Pomoraví Protected Landscape Area*]. Unpublished manuscript. Deposited in: Administration of the Litovelské Pomoraví PLA, Litovel, 3 pp. (un-paginated, in Czech).
- KOČÁREK P. 1997: Výskyt brouků ze skupin Silphidae a Leiodidae: Cholevinae (Coleoptera) na území Litovelské Pomoraví. (The occurrence of Silphidae and Leiodidae: Cholevinae (Coleoptera) in Litovelské Pomoraví Protected Landscape Area). *Zprávy Vlastivědného Muzea v Olomouci* **275**: 17–29 (in Czech, English summary).
- LÖBL I. & SMETANA A. (eds) 2003: *Catalogue of Palaearctic Coleoptera, Vol. 1: Archostemata – Myxophaga – Adepfaga*. Apollo Books, Stenstrup, 819 pp.
- LÖBL I. & SMETANA A. (eds) 2004: *Catalogue of palaearctic Coleoptera, Vol. 2: Hydrophiloidea, Histeroidea, Staphylinoidea*. Apollo Books, Stenstrup, 942 pp.
- LÖBL I. & SMETANA A. (eds) 2006: *Catalogue of Palaearctic Coleoptera, Vol. 3: Scarabaeoidea – Scirtoidea – Dasciloidea – Buprestoidea – Byrrhoidea*. Apollo Books, Stenstrup, 690 pp.
- LÖBL I. & SMETANA A. (eds) 2007: *Catalogue of Palaearctic Coleoptera, Vol. 4: Elateroidea – Derodontoidea – Bostrichoidea – Lymexyloidea – Cleroidea – Cucujoidea*. Apollo Books, Stenstrup, 935 pp.
- LÖBL I. & SMETANA A. (eds) 2008: *Catalogue of Palaearctic Coleoptera, Vol. 5: Tenebrionoidea*. Apollo Books, Stenstrup, 670 pp.
- LÖBL I. & SMETANA A. (eds) 2010: *Catalogue of Palaearctic Coleoptera, Vol. 6: Chrysomeloidea*. Apollo Books, Stenstrup, 924 pp.
- MALOHLAVA V. 1995: *Střevlíkovití jako součást epigeonu na vybraných stanovištích v lesním ekosystému v Litovelském Pomoraví*. [*Carabidae as a part of the epigeon in selected habitats of the forest ecosystem of the Litovelské Pomoraví region*]. Unpublished diploma thesis. Deposited in: Department of Zoology and Anthropology, Faculty of Science, Palacký University Olomouc, 172 pp. (in Czech, English summary).
- NAKLÁDAL O. & PRŮDEK P. 2008: Faunistic records from the Czech Republic – 264 (Coleoptera: Cryptophagiidae). *Klapalekiana* **44**: 294.

- NAKLÁDAL O. & SÖRENSSON M. 2008: New records of the Ptiliidae (Coleoptera) from the Czech Republic. (Nové nálezy druhů čeledi Ptiliidae (Coleoptera) z České republiky). *Klapalekiana* **44**: 35–41.
- NAKLÁDAL O. 2003: *Střevlíkovití (Coleoptera: Carabidae) Litovelského Pomoraví a jejich využití k hodnocení kvality přírodního prostředí sledované oblasti*. [Ground beetles (Coleoptera: Carabidae) in the Litovelské Pomoraví Protected Landscape Area and their use as bioindicators]. Unpublished diploma thesis. Deposited in: Faculty of Forestry, Czech University of Agriculture Prague, 154 pp. (in Czech).
- NAKLÁDAL O. 2006: *Průzkum brouků (Coleoptera) podlitovelských luhů provedených v roce 2006*. [Survey of beetles (Coleoptera) in the floodplain forests in the southeastern part of the Litovelské Pomoraví Protected Landscape Area in 2006]. Unpublished manuscript. Deposited in: Administration of the Litovelské Pomoraví PLA, Litovel, 31 pp. (in Czech).
- NAKLÁDAL O. 2008: Results of a faunistic survey of beetles (Coleoptera) in floodplain forests of the Litovelské Pomoraví Protected Landscape Area (Czech Republic, Northern Moravia) in 2006. (Výsledky faunistického průzkumu brouků (Coleoptera) luhů CHKO Litovelské Pomoraví (Česká republika, severní Morava) provedeném v roce 2006). *Klapalekiana* **44**: 237–269.
- PRUNER L. & MÍKA P. 1996: Seznam obcí a jejich částí v České republice s čísly mapových polí pro síťové mapování fauny. (List of settlements in the Czech Republic with associated map field codes for faunistic grid mapping system). *Klapalekiana Supplementum* **32**: 1–115.
- ŘEHOUNEK J. 1997: *Príspevek k poznání fauny mandelinkovitých (Coleoptera: Chrysomelidae) CHÚ Hejtmanka a Třesín*. [Contribution to the knowledge of the leaf beetles (Coleoptera: Chrysomelidae) of the protected sites at Hejtmanka and Třesín]. Unpublished manuscript. Deposited in: Administration of Litovelské Pomoraví PLA, Litovel, 1 p. (un-paginated, in Czech).
- RŮŽIČKA J. & VÁVRA J. 1993: Rozšíření a ekologie brouků rodu Choleva (Coleoptera: Leiodidae: Cholevinae) na území Čech, Moravy a Slovenska. (The distribution and ecology of the genus Choleva (Coleoptera: Leiodidae: Cholevinae) throughout Bohemia, Moravia and Slovakia). *Klapalekiana* **29**: 103–130 (in Czech, English abstr.).
- SKALICKÝ S. 1987: *Nenazváno*. [No name]. Unpublished manuscript. Deposited in: Administration of the Litovelské Pomoraví PLA, Litovel, 5 pp. (un-paginated, in Czech).
- TRÁVNÍČEK D., BOUKAL D. S., BOUKAL M. & JEZIORSKI P. 1997: Faunistic records from the Czech Republic – 69. Coleoptera: Haliplidae, Dytiscidae, Hydraenidae, Hydrochidae, Hydrophilidae, Byrrhidae. *Klapalekiana* **33**: 123–127.
- TUF I. H. 2001: *Zpráva o edafonu NPR Vrapač a PP U zámecké Moravy – závěrečná zpráva pro CHKO Litovelské Pomoraví*. [Report on the edaphon in the Vrapač National Nature Reserve and the U zámecké Moravy Nature Monument – final report for the Administration of the Litovelské Pomoraví Protected Landscape Area]. Unpublished manuscript. Deposited in: Administration of the Litovelské Pomoraví PLA, Litovel, 4 pp. + 18 un-numbered pages (in Czech).
- TVARDÍK D. 2000: *Střevlíkovití (Col., Carabidae) v epigeonu lužního lesa CHKO Litovelské Pomoraví*. [Ground beetles (Col., Carabidae) in the epigeon of the floodplain forest of the Litovelské Pomoraví Protected Landscape Area]. Unpublished diploma thesis. Deposited in: Faculty of Science, Palacký University Olomouc, 58 pp. (in Czech).
- VESELÝ P., RESL K., STANOVSKÝ J., FARKAČ J., GRYCZ F., KAŠPAR L., KMECO R., KOPECKÝ T., KŘIVAN V., LÁSKA R., MIKYŠKA A., MLEJNEK R., MORAVEC P., NAKLÁDAL O., PROUZA J., ŘÍHA J., VONIČKA P. & ZÚBER M. 2009: Zajímavé nálezy střevlíkovitých brouků (Coleoptera, Carabidae) z České republiky v letech 2002 – 2006 a doplněk údajů o sběrech z předcházejícího období. (Interesting findings of ground beetles (Coleoptera, Carabidae) from the Czech Republic in the years 2002–2006 with supplementary earlier data). *Klapalekiana* **45**: 83–116.
- VORST O. (ed.) 2010: *Catalogus van de Nederlandse kevers*. (Catalogue of the Coleoptera of the Netherlands). Monografieën van de Nederlandse Entomologische Vereniging **11**: 1–317 pp. + CD (in Dutch, English introduction and summary).

SOUHRN

V roce 2009 byl proveden inventarizační průzkum brouků (Coleoptera) NPR Vrapač. Rezervace se nachází v CHKO Litovelském Pomoraví na severní Moravě (GPS: 49°42'31"N; 17°02'23"E – těžiště plochy). Během průzkumu bylo zaznamenáno 520 druhů z 57 čeledí.

Zaznamenané druhy *Carabus scheidleri* (Carabidae) a *Oxythyrea funesta* (Scarabaeidae) jsou dle vyhlášky 395/1992 sb. řazeny mezi ohrožené druhy. Dalších 42 druhů je řazeno do Červeného seznamu bezobratlých živočichů České republiky.

Mezi kriticky ohrožené druhy patří *Micropeplus longipennis* (Staphylinidae), *Symbiotes latus* (Endomychidae) a *Agnathus decoratus* (Pyrochroidae).

Mezi ohrožené pak patří *Carphacis striatus*, *Xantholinus tricolor* (Staphylinidae), *Chaetophora spinosa* (Byrrhidae), *Eucnemis capucina*, *Microrhagus lepidus* (Eucnemidae), *Stenagostus rhombeus* (Elateridae), *Melandrya barbata* (Melandryidae), *Phytobaenus amabilis* (Aderidae), *Bruchidius varius*, *Cryptocephalus pusillus*, *Gonioctena linnaeana linnaeana*, *Longitarsus brunneus*, *Oomorphus concolor* (Chrysomelidae).

Harpalus progrediens (Carabidae), *Adrastus rachifer*, *Ampedus sanguinolentus* (Elate-ridae), *Saperda octopunctata* (Cerambycidae), *Enedreytes sepicola* (Anthribidae), *Acalles camelus*, *Acalles fallax*, *Cotaster uncipes*, *Neophytobius granatus*, *Trachodes hispidus* (Curculionidae) jsou druhy řazené do kategorie téměř ohrožených druhů.

Acupalpus luteatus (Carabidae), *Aeletes atomarius* (Histeridae), *Cyphea curtula*, *Euryusa sinuata*, *Ochtheophilus omalinus*, *Thamiaraea cinnamomea* (Staphylinidae), *Onthophagus verticicornis* (Scarabaeidae), *Agrilus betuleti*, *Agrilus convexicollis* (Buprestidae), *Phosphaenus hemipterus* (Lampyridae), *Notolaemus castaneus* (Laemophloeidae), *Endomychus coccineus* (Endomychidae), *Triphyllus bicolor* (Mycetophagidae), *Anisoxya fuscula*, *Conopalpus testaceus* (Melandryidae) a *Poophagus sisymbrii* (Curculionidae) patří mezi zranitelné druhy.