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Results of faunistic research on the beetles (Coleoptera) of Mlyňany Arboretum

Výsledky faunistického prieskumu chrobákov (Coleoptera) v Arboréte Mlyňany

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Abstract. Faunistic research on beetles (Coleoptera) was carried out between 2013 and 2015 at the Mlyňany Arboretum in Nitriansky kraj region in Slovakia. Specimens were collected weekly, by individual sampling (hand collecting), pitfall and hanging intercept traps, sweeping, beating and blacklighting on canvas. The survey focused only on producing a faunistic inventory of the species of beetles (Coleoptera); other insect groups were not evaluated. The material collected was evaluated ecosozologically according to the red list of beetles (Coleoptera) of Slovakia. During the faunistic research, 604 species of beetles were found belonging to 58 families. The most numerous families were Curculionidae (108 species) and Staphylinidae (64 species). Faunistically interesting species include *Opanthribus tessellatus* (Boheman, 1829) (Anthribidae), *Scobicia chevrieri* (A. Villa et J. B. Villa, 1835) (Bostrichidae), *Nanophyes brevis* Boheman, 1845 (Brentidae), *Prionus coriarius* (Linnaeus, 1758) (Cerambycidae), *Hypera striata* (Boheman, 1834), *Orchestes subfasciatus* (Gyllenhal, 1836) (Curculionidae), *Porthmidius austriacus* (Schrank, 1781), *Stenagostus rufus* (De Geer, 1774) (Elateridae), *Triplax lepida* (Faldermann, 1837) (Erotylidae), *Hydrophilus piceus* (Linnaeus, 1758) (Hydrophilidae), *Bruchidius siliquastri* Delobel, 2007 (Chrysomelidae), *Laemophloeus monilis* (Fabricius, 1787) (Laemophloeidae), *Lucanus cervus* (Linnaeus, 1758) (Lucanidae), *Lytta vesicatoria* (Linnaeus, 1758) (Meloidae), *Oryctes nasicornis* (Linnaeus, 1758), *Protaetia aeruginosa* (Linnaeus, 1767) (Scarabaeidae), *Abemus chloropterus* (Panzer, 1796), *Hesperus rufipennis* (Gravenhorst, 1802) (Staphylinidae), *Tenebroides fuscus* (Goeze, 1777) (Trogossitidae), *Diodesma subterranea* Latreille, 1829, *Synchita mediolanensis* A. Villa et J. B. Villa, 1833 (Zopheridae). According to the ecosozological classification, of those with a status, one species is listed as endangered, fifteen species are vulnerable, five species are near threatened and one species is listed as least concern.

INTRODUCTION

The large collection of plant taxa in Mlyňany Arboretum provides a rich basis for research and study of the range of species of entomofauna and observation of their characteristics, ecology, trophic relationships etc. Results of past entomological research in Mlyňany Arboretum were summarized by Hrubík (1987). Hrubý (1956, 1958) published on the butterflies of Mlyňany Arboretum. Other entomological research has mainly focused on harmful entomofauna. The large number of plant taxa, especially including introduced species, provides a basis for the study of alien and invasive insect species. Several works have dealt with the faunistics of cecidicolous insects (Skuhravá & Skuhravý 1986, 1989; Skuhravá et al. 1992a, b; Barta 2008b). Some authors have studied harmful and alien insect species in the arboretum area (Barta 2008a, 2009, 2012; Barta & Konôpková 2013;

Hrubík 1967; Kollár 2009, 2010; Kollár & Barta 2016). Some later research has also dealt with the influence of woody plant structure on the arthropod communities (Stašiov et al. 2014). No entomological research focused on beetles (Coleoptera) has been carried out in Mlyňany Arboretum. The studied area contains a large number of old and non-native woody plant species. Considering the high species richness of the plant communities (native and non-native plant species combined) in Mlyňany Arboretum we predicted the occurrence of species-rich beetle assemblages and communities in this area. Due to the large number of non-native plant species we also predicted the occurrence of non-native and new beetle species for Slovakia. Since the Arboretum may provide a refuge for fauna, we also predicted the occurrence of species associated with both woodlands and agricultural landscapes, some of which could be scarce or threatened (e.g. red-listed species) as a result of human activities. The aim of this research was to evaluate the faunistic structure of the beetles of the studied locality, make an ecosozological evaluation of the recorded species, and indicate faunistically interesting beetle species.

MATERIAL AND METHODS

Mlyňany Arboretum (48°18′56.095″–48°19′36.366″N 18°21′43.051″–18°22′35.733″E, Number of square of the Databank of Slovakian Fauna (DFS) 7676) is located in south-western Slovakia, in the valley of the Žitava river at an altitude of 165–217 m a. s. l. The arboretum area belongs to a warm, dry climatic region, with an average annual temperature of 10.6 °C and rainfall totalling 541 mm (Hrubík et al. 2011). Phytogeographically it belongs to the Pannonian region, with a Querceto-carpinetum association (Steinhübel 1957). The most represented soil subtype in the arboretum is pseudogley (Polláková & Konôpková 2012). Soil in the arboretum area is medium heavy and prevailingly silty-loam, loamy and clay-loam (Polláková et al. 2016). Faunistic research at Mlyňany Arboretum was carried out between 2013 and 2015. Specimens were collected weekly by individual sampling, pitfall traps and hanging intercept traps (the dates in Table 2 are dates that samples were removed from traps) , sweeping, beating and blacklighting on canvas (the last method not used every week). Traps were set in different places, under tree canopy cover as well as in the open. The survey focused only on a faunistic inventory of the species of beetles (Coleoptera). Other insect groups were not evaluated. The material collected was evaluated ecosozologically according to the red list of beetles (Coleoptera) of Slovakia (Holecová & Franc 2001). For determination and study of species collected, the following sources were used: Balfour-Browne (1953), Balthasar (1956), Bense (1995), Bielawski (1959), Bílý (1989), Borowiec (1980), Borowiec & Tarnawski (1982, 1983), Boukal (2017), Burakowski (1991, 2003), Burakowski & Ślipiński (1981, 1986), Cmoluch (1997), Dieckmann (1972, 1977, 1980, 1983, 1986, 1988), Dominik (1954), Galewski (1971), Gerstmeier (1998), Háva (2011), Hůrka (1996), Kubisz (1992), Kubisz & Szwałko (1998), Kuśka (1995), Laibner (2000), Mazur (1973, 1983), Mroczkowski (1955), Nedvěd (2015), Novák (2014), Nunberg (1954, 1976, 1987), Reška (1994), Ślipiński (1983), Smreczynski (1965, 1966, 1968), Stebnicka (1976, 1983, 1987), Szujecki (1980, 1965, 1976, 2008, 2013), Tranda (1969), Trautner & Geigenmueller (1987), Warchałowski (1971, 1973, 1978), Zahradník (2013).

The nomenclature of valid scientific names and the classification of beetle families follow Zahradník (2017). Examples of all species collected are deposited in the collection of Ján Kollár.

RESULTS AND DISCUSSION

During the faunistic research 604 species of beetles were found, belonging to 58 families. The most numerous families were Curculionidae (108 species) and Staphylinidae (64 species). The percentage of total species per family is shown in Fig. 1. Families with low numbers of species are united in the category “Others” (Table 1).

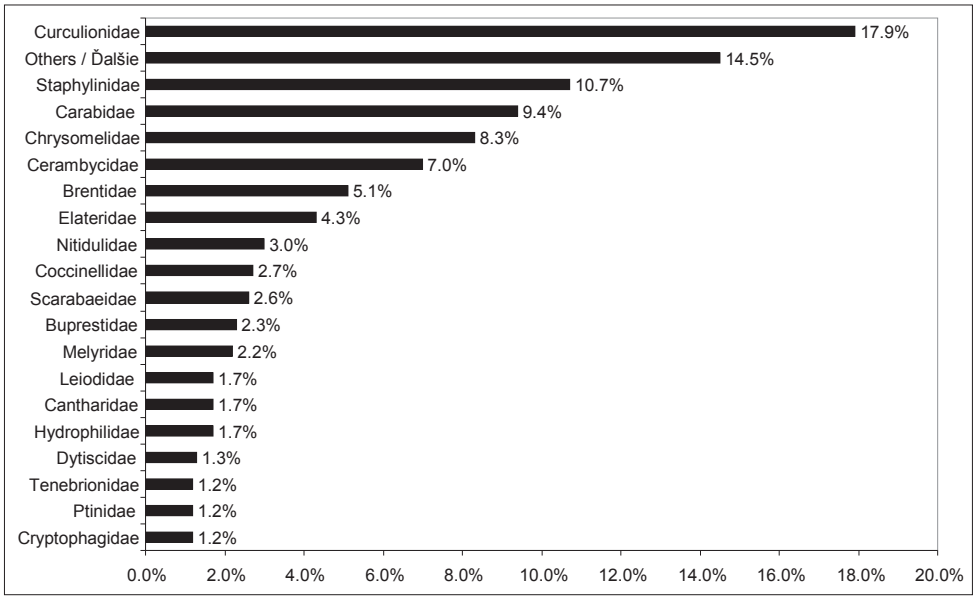


Fig. 1. Percentage of total beetle species recorded in Mlyňany Arboretum (2013–2015) by family.
Obr. 1. Celkový podiel zistených druhov chrobákov podľa čeľadí v Arboréte Mlyňany (roky 2013–2015).

Comments on faunistically significant species

Anthribidae

Opanthribus tessellatus (Boheman, 1829)

According to Strejček (1990) this is a widely distributed species, which develops in deciduous trees. In central Europe it is a very rare taxon regarded as a relict of unaltered primary deciduous forests (Benedikt et al. 2010). There are more records from Slovakia than from the Czech Republic, but it is still a rare species.

Bostrichidae

Scobicia chevrieri (A. Villa et J. B. Villa, 1835)

A new species of powderpost beetle to the fauna of Slovakia (Kollár 2014). It is native to the Mediterranean region, and has subsequently been found in several other localities in Slovakia. Host plants are probably deciduous hardwood trees such as beech and oak, probably ash. It develops in dying and dead branches (Kollár 2014).

Brentidae

Nanophyes brevis Boheman, 1845

According to Benedikt et al. (2010) this is a rare species, which has been confirmed from many localities in Slovakia, mostly in the lowlands, but some records suggest its possible expansion northwards via river valleys.

Cerambycidae

Prionus coriarius (Linnaeus, 1758)

Larvae of this longhorn beetle develop in underground parts of deciduous and coniferous trees. Some specimens in Mlyňany Arboretum were found in stumps of *Pinus nigra* or in pitfall traps. The conditions are favourable for its larval development in the observed area.

Curculionidae

Hypera striata (Boheman, 1834)

A nocturnal species, which occurs mainly at the margins of steppe or forest-steppe, however it is also known from secondary biotopes including ruderal sites. The occurrence of the weevil in Slovakia is centred on the lowlands, warm hilly areas and the Carpathian foothills primarily of western and central Slovakia (Benedikt et al. 2010). In Mlyňany Arboretum it is a rare species, collected by sweeping.

Orchestes subfasciatus (Gyllenhal, 1836)

A local, rarely recorded species, mostly known from south-eastern regions of Europe. It develops on *Quercus* sp. It is distributed in the southern regions of western and central Slovakia (Benedikt et al. 2010).

Elateridae

Porthmidius austriacus (Schrank, 1781)

A local and rare species in Slovakia. It develops in forest soil with a deep layer of forest floor litter and rotten stumps. In Mlyňany Arboretum it was collected by beating oak.

Stenagostus rufus (De Geer, 1774)

A click beetle species with larvae that develop underground, at the bases of trunks of pine trees. The larvae are predators. The main food of the larvae in the arboretum are larvae of the longhorn beetle *Prionus coriarius*, and they found together at the locality. This locality is a new faunistic square for this click beetle.

Erotylidae

Triplax lepida (Faldermann, 1837)

A rare species, which is associated with bright forests and warmer areas in Slovakia. A specimen was found in pitfall trap.

Hydrophilidae

Hydrophilus piceus (Linnaeus, 1758)

Rare vulnerable aquatic species, which occurs in standing water with rich vegetation. Specimens have been found in the Japanese lake in the arboretum.

Table 1. Total numbers of beetle species per family recorded in Mlyňany Arboretum (2013–2015); families reported in "Others" category.
Tabuľka 1. Celkový počet druhov chrobákov v Arboréte Mlyňany (roky 2013–2015) podľa čeľadí zaradených do kategórie „Ďalšie".

Family / čeľaď	Number of species / počet druhov	Family / čeľaď	Number of species / počet druhov
Alexiidae	1	Latridiidae	2
Anthicidae	1	Lucanidae	2
Anthribidae	5	Lycidae	1
Attelabidae	6	Melandryidae	5
Bostrichidae	2	Meloidae	3
Byrrhidae	2	Monotomidae	2
Byturidae	1	Mycetophagidae	2
Cerylonidae	1	Oedemeridae	5
Ciidae	1	Orsodacnidae	1
Cleridae	4	Phalacridae	1
Dermestidae	4	Pyrochroidae	1
Endomychidae	1	Salpingidae	1
Erotylidae	3	Scirtidae	3
Eucnemidae	1	Silphidae	6
Gyrinidae	1	Silvanidae	1
Haliplidae	1	Tenebrionidae	6
Helophoridae	2	Throscidae	1
Heteroceridae	2	Trogidae	3
Histeridae	6	Trogossitidae	1
Laemophloidae	1	Zopheridae	2
Lampyridae	1		

Chrysomelidae

Bruchidius siliquastri Delobel, 2007

A relatively new species for science, only described in 2007 by Delobel. In 2003, it was first recorded in southern France (Kergoat et al. 2007). It was later found in 2004 in Hungary (Bodor & György 2014) and then in Slovakia in the Mlyňany Arboretum in 2006. The larvae develop in seeds of the Judas tree (*Cercis* sp.), which is well-represented in the arboretum.

Laemophloeidae

Laemophloeus monilis (Fabricius, 1787)

Rare species, which occurs in bright forests and in solitary trees in the warmer areas. An individual specimen was found under the bark of *Quercus robur*.

Lucanidae

Lucanus cervus (Linnaeus, 1758)

A species of European importance, the larvae of which develop in old rotten stumps of deciduous trees. Larvae of this species have also been found in birch stumps in Mlyňany Arboretum.

Meloidae

Lytta vesicatoria (Linnaeus, 1758)

Rare species of local distribution. Adults feed mainly on *Fraxinus* sp. During our research it was found on *Fraxinus excelsior* and *F. madshurica*. We also recorded defoliation on *F. madshurica*.

Scarabaeidae

Oryctes nasicornis (Linnaeus, 1758)

A protected species of national significance, which develops in the rotten stumps of deciduous trees. This species is rare in Mlyňany Arboretum, but there are sufficient old stumps for larval development.

Protaetia (*Cetonischema*) *aeruginosa* (Linnaeus, 1767)

A vulnerable species in Slovakia. Larvae develop in cavities of old deciduous trees, in stumps or large branches. It was collected in flight.

Staphylinidae

Abemus chloropterus (Panzer, 1796)

A rare thermophilous predaceous rove beetle species. This species occurs in forest-steppe areas and deciduous forests at lower elevation. It was often collected in pitfall traps and in flight using nets.

Hesperus rufipennis (Gravenhorst, 1802)

A rare rove beetle species, which occurs in cavities of old trees. One specimen of this beetle was recorded in a pitfall trap situated under trees.

Trogossitidae

Tenebroides fuscus (Goeze, 1777)

An uncommon species, attached to native deciduous forests. *Tenebroides fuscus* occurs under bark and in rotten parts of old deciduous trees. We found one specimen under the bark of *Castanea sativa* in Mlyňany Arboretum.

Zopheridae

Diodesma subterranea Latreille, 1829

Very rare endangered species with local distribution in Slovakia. It is regarded as a relict of unaltered primary deciduous forests. A specimen was collected by beating branches.

Synchita mediolanensis A. Villa et J. B. Villa, 1833

A rare, vulnerable species, attached to lighter forest in warmer areas in Slovakia. A specimen was collected by beating branches .

Ecosozological evaluation of collected species

The species collected were classified into three categories according to an ecosozological classification (Holecová & Franc 2001). Of those with a status, one species is listed as endangered (EN), fifteen species are vulnerable (VU), five species are near threatened (LR:nt) and one species is listed as least concern (LR:1c).

Proposal for ecosozological measurement

Some endangered and vulnerable species develop in old trees or in their remains (*Lucanus cervus*, *Oryctes nasicornis*, *Prionus coriarius*, *Stenagostus rufus* etc.). Therefore is necessary to preserve these types of trees in arboretums, botanical gardens or other dendrological collections. The oldest and most damaged trees have survived in the marginal parts of the arboretum, which are least accessible to visitors and thus their level of maintainance is lower. For some species, which develop in semi-dry and dry wood is necessary for damaged parts of the branches to be kept on the trees. This type of management will be possible only away from footpaths, because of visitor safety. The arboretum has numerous areas of flowering meadows that are mowed only twice per year, which is beneficial for insects (*Cyphocleonus trisulcatus*, *Lixus bardanae*, *Protapion interjectum*, *Tychius cuprifer* etc.). Aquatic habitats are very important elements in the arboretum, for hydrophilous (*Acilius sulcatus, Helophorus asperatus, Hydroporus angustatus*, *Hydrophilus piceus*), hygrophilous and semihygrophilous species (*Bembidion* sp., *Galerucella aquatica, Nanophyes marmoratus*, *Notaphus varius*). Smaller lakes have often become covered with plants or overgrown by algae. Lakes in this condition have lower quality of water and insect biodiversity throughout the year. We recommend regular cleaning and maintainance of lakes and maintaining adequate amounts of hydrophytes and hygrophytes for water purification.

CONCLUSIONS

The rich dendrological and botanical collection of non-native and native plants in Mlyňany Arboretum contributes to the high diversity of its entomofauna. Based on the results, we can confirm the occurence of many species-rich beetle communities in Mlyňany Arboretum. Our prediction, that the Mlyňany Arboretum provides suitable biotopes for rare and threatened species, especially species attached to old, damaged and dead trees, or water areas, was supported. The occurrence of introduced plant species and the exchange of biological material between botanical institutes are prerequisites for the occurrence of new non-native insect species. Faunistic research, which took place over three years in the arboretum, has verified the occurrence of new species for Slovakia, and non-native species of beetles. The results of entomofauna research in the arboretum reveal the need for further detailed research in the arboretum and in other similar dendrological collections in Slovakia.

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SÚHRN

V rokoch 2013 až 2015 bol realizovaný faunistický prieskum chrobákov (Coleoptera) na lokalite Arborétum Mlyňany SAV. Výskumný materiál bol zbieraný každý týždeň individuálnym zberom, prostredníctvom zemných a visiacich pascí, smýkaním, sklepávaním a svietením UV svetlom na plátno. Prieskum bol zameraný len na faunistickú inventarizáciu druhového spektra chrobákov (Coleoptera). Ostatné skupiny hmyzu neboli vyhodnocované. Materiál bol po spracovaní ekosozologicky vyhodnotený podľa červeného zoznamu chrobákov (Coleoptera) Slovenska (Holecová & Franc 2001). Počas faunistického prieskumu bolo celkovo zistených 604 druhov chrobákov, patriacich do 58 čeľadí, z toho bolo najviac druhov zistených z čeľadí Curculionidae (108 druhov) a Staphylinidae (64 druhov). Faunisticky zaujímavými zistenými druhmi sú *Opanthribus tessellatus* (Boheman, 1829) (Anthribidae), *Scobicia chevrieri* (A. Villa et J. B. Villa, 1835) (Bostrichidae), *Nanophyes brevis* Boheman, 1845 (Brentidae), *Prionus coriarius* (Linnaeus, 1758) (Cerambycidae), *Hypera striata* (Boheman, 1834), *Orchestes subfasciatus* (Gyllenhal, 1836) (Curculionidae), *Porthmidius austriacus* (Schrank, 1781), *Stenagostus rufus* (De Geer, 1774) (Elateridae), *Triplax lepida* (Faldermann, 1837) (Erotylidae), *Hydrophilus piceus* (Linnaeus, 1758) (Hydrophilidae), *Bruchidius siliquastri* Delobel, 2007 (Chrysomelidae), *Laemophloeus monilis* (Fabricius, 1787) (Laemophloeidae), *Lucanus cervus* (Linnaeus, 1758) (Lucanidae), *Lytta vesicatoria* (Linnaeus, 1758) (Meloidae), *Oryctes nasicornis* (Linnaeus, 1758), *Protaetia aeruginosa* (Linnaeus, 1767) (Scarabaeidae), *Abemus chloropterus* (Panzer, 1796), *Hesperus rufipennis* (Gravenhorst, 1802) (Staphylinidae), *Tenebroides fuscus* (Goeze, 1777) (Trogossitidae), *Diodesma subterranea* Latreille, 1829, *Synchita mediolanensis* A. Villa et J. B. Villa, 1833 (Zopheridae). Z hľadiska ekosozologického bol do skupiny ohrozených zaradený jeden druh, do skupiny zraniteľných pätnásť druhov, do skupiny takmer ohrozených päť druhov a do skupiny najmenej ohrozených jeden druh.

Tabuľka 2. Zoznam zistených druhov chrobákov na lokalite Arborétum Mlyňany (2013 – 2015). Vysvetlivky: NE (ohrozený), VU (zraniteľný), LR (menej ohrozený); LR:nt (takmer ohrozený), LR:1c (najmenej ohrozený), LI (neohrozený).
Table 2. List of beetle species recorded at Mlyňany Arboretum (2013 – 2015). Explanations: NE (Endangered), VU (Vulnerable), LR (Lower risk); LR:nt (Near threatened), LR:1c (Least concern), LI (Non-endangered).

Family with species / čeľaď s druhom	Date of collections / dátum zberu	Collection method /Vulnerability / metóda zberu / Ohrozenosť
Alexiidae		
Sphaerosoma pilosum (Panzer, 1793)	27.viii.2014	pitfall trap LI
Anthicidae		
Anthicus antherinus (Linnaeus, 1761)	18.iv.2014	pitfall trap LI
Anthribidae		
Anthribus nebulosus Forster, 1770	26.iv.2013	beating LI
Enedreutes sepicola (Fabricius, 1792)	30.vii.2014, 2.vii.2014	beating LI
Opanthribus tessellatus (Boheman, 1829)	26.iv.2013	beating VU
Phaeochrotes pudens (Gyllenhal, 1833)	13.vi.2013	beating LI
Platystomos albinus (Linnaeus, 1758)	6.vi.2013, 11.v.2015	beating LI
Attelabidae		
Attelabus nitens (Scopoli, 1763)	21.v.2014	beating LI
Neocoenorrhinus germanicus (Herbst, 1797)	18.iv.2013	sweeping LI
Neocoenorrhinus pauxillus (Germar, 1824)	26.iv.2013	beating LI
Rhynchites auratus (Scopoli, 1763)	17.v.2013, 9.v.2013, 11.v.2015, 16.v.2015	beating LI
Rhynchites bacchus (Linnaeus, 1758)	17.v.2013, 28.iii.2014	beating LI
Tatianaerhynchites aequatus (Linnaeus, 1767)	26.iv.2013, 17.v.2013, 23.iv.2014	beating LI
Bostrichidae		
Lichenophanes varius (Illiger, 1801)	28.v.2014	beating VU
Scobicia chevrieri (A. Villa et J. B. Villa, 1835)	21.vi.2013	blacklight LI
Brentidae		
Betulapion simile (W. Kirby, 1811)	30.vii.2014, 23.iv.2014, 2.vii.2014	beating LI
Catapion seniculus (W. Kirby, 1808)	26.iv.2013, 12.vii.2013, 19.vii.2013, 4.vii.2013, 30.iv.2014	sweeping LI
Catapion pubescens Kirby, 1811	17.vii.2014	sweeping LI
Catapion jaffense (Desbrochers, 1896)	16.vii.2014, 21.v.2014	sweeping LI
Ceratapion gibbirostre (Gyllenhal, 1813)	18.iv.2013	sweeping LI
Ceratapion onopordi (W. Kirby, 1808)	19.iv.2013, 4.vii.2013	sweeping LI
Ceratapion penetrans (Germar, 1817)	4.vii.2013, 21.vi.2013, 9.v.2013, 2.vii.2014	sweeping LI
Cyanapion columbinum (Germar, 1817)	13.vi.2013, 4.vii.2013, 24.v.2013, 19.vii.2013, 30.vii.2014, 4.vi.2014	sweeping LI
Diplapion confluens (W. Kirby, 1808)	26.iv.2013, 30.iv.2014, 7.v.2014	sweeping LI
Diplapion stolidum (Germar, 1817)	7.v.2014, 30.iv.2014, 16.vii.2014	sweeping LI

Eutrichapion melancholicum (Wencker, 1864)	4.vii.2013	sweeping	LI
Exapion fuscirostre (Fabricius, 1775)	19.vii.2013	sweeping	LI
Ischnopterapion loti (W. Kirby, 1808)	21.vi.2013, 9.v.2013, 4.vii.2013, 19.vii.2013, 26.iv.2013, 30.iv.2014, 16.vii.2014	sweeping	LI
Ischnopterapion virens (Herbst, 1797)	18.iv.2013, 19.iv.2013	sweeping	LI
Metatrichapion pavidum (Germar, 1817)	11.vi.2014	sweeping	LI
Nanophyes brevis Boheman, 1845	29.vii.2013	sweeping	LI
Nanophyes marmoratus (Goeze, 1777)	29.vii.2013, 19.vii.2013, 21.v.2014	sweeping	LI
Omphalapion hookerorum (W. Kirby, 1808)	18.iv.2013	sweeping	LI
Perapion marchicum (Herbst, 1797)	6.vi.2013	sweeping	LI
Perapion violaceum (W. Kirby, 1808)	6.vi.2013, 30.iv.2014	sweeping	LI
Protapion apricans (Herbst, 1797)	19.vii.2013, 4.vii.2013, 12.vii.2013, 17.v.2013, 11.vi.2014	sweeping	LI
Protapion assimile (W. Kirby, 1808)	30.iv.2014	sweeping	LI
Protapion fulvipes (Geoffroy, 1785)	4.vii.2013, 30.iv.2014, 2.vii.2014	sweeping	LI
Protapion interjectum (Desbrochers, 1895)	21.v.2014	sweeping	LI
Protapion nigritarse (W. Kirby, 1808)	18.iv.2013, 2.iv.2014	sweeping	LI
Protapion trifolii (Linnaeus, 1768)	4.vii.2013, 7.v.2014	sweeping	LI
Protapion varipes (Germar, 1817)	18.iv.2013	sweeping	LI
Rhopalapion longirostre (Olivier, 1807)	4.vi.2014	sweeping	LI
Taeniapion urticarium (Herbst, 1784)	18.iv.2013	sweeping	LI
Trichopterapion holosericeum (Gyllenhal,1833)	24.v.2013	sweeping	LI
Buprestidae			LI
Agrilus angustulus (Illiger, 1803)	13.vi.2013	beating	LI
Agrilus cuprescens (Ménétriés, 1832)	21.vi.2013	beating	LI
Agrilus derasofasciatus Boisduval et Lacordaire, 1835	21.vi.2013, 1.vii.2015, 16.vii.2014	beating	LI
Agrilus laticornis (Illiger, 1803)	13.vi.2013, 24.v.2013, 17.v.2013	beating	LI
Agrilus sulcicollis Lacordaire in Boisduval et Lacordaire, 1835	23.iv.2014, 4.vi.2014	beating	LI
Anthaxia fulgurans (Schrank, 1789)	21.vi.2013, 6.vi.2013, 13.vi.2013, 7.v.2014, 21.v.2014, 15.v.2015	sweeping	LI
Anthaxia nitidula (Linnaeus, 1758)	24.v.2013, 17.v.2013, 7.v.2014, 30.iv.2014, 4.vi.2014, 5.v.2015	sweeping	LI
Anthaxia podolica Mannerheim, 1837	13.vi.2013, 11.vi.2014	sweeping	LI
Anthaxia quadripunctata (Linnaeus, 1758)	21.vi.2013, 13.vi.2013, 6.vi.2013, 11.vi.2014, 4.vi.2014, 21.v.2014	sweeping	LI
Anthaxia semicuprea Küster, 1851	18.vi.2014	sweeping	LI
Coraebus florentinus (Herbst, 1801)	19.vii.2013	hand collecting	VU
Phaenops cyanea (Fabricius, 1775)	2.vii.2014	hand collecting	LI

Trachys fragariae Brisout de Barneville, 1874	18.iv.2013	sweeping	LI
Trachys minutus (Linnaeus, 1758)	17.v.2013, 9.v.2013	beating	LI
Byrrhidae			
Cytilus sericeus (Forster, 1771)	18.iv.2013	hand collecting	LI
Byrrhus pilula (Linnaeus, 1758)	23.iv.2014	pitfall trap	LI
Byturidae			
Byturus ochraceus (Scriba, 1790)	9.v.2013, 30.iv.2014, 11.vi.2014, 4.vi.2014, 5.v.2015	sweeping	LI
Cantharidae			
Cantharis decipiens Baudi, 1871	30.iv.2014, 7.v.2014	beating	LI
Cantharis flavilabris Fallen, 1807	2.vii.2014	sweeping	LI
Cantharis fusca Linnaeus, 1758	3.v.2013, 9.v.2013	beating	LI
Cantharis obscura Linnaeus, 1758	9.v.2013, 30.iv.2014	sweeping	LI
Cantharis pallida Goeze, 1777	24.v.2013	beating	LI
Cantharis rufa Linnaeus, 1758	21.vi.2013, 17.v.2013	beating	LI
Malthinus flaveolus (Herbst, 1786)	17.v.2013	beating	LI
Rhagonycha lignosa (Muller, 1764)	9.v.2013	beating	LI
Rhagonycha nigriventris Motschulsky, 1860	24.v.2013	beating	LI
Carabidae			
Abax parallelepipedus (Piller et Mitterpacher, 1783)	19.v.2013, 31.v.2013, 24.v.2013, 23.iv.2014	pitfall trap	LI
Acupalpus maculatus (Schaum, 1860)	21.vi.2013	blacklight	LI
Amara aenea (De Geer, 1774)	6.vi.2013, 18.iv.2013	pitfall trap	LI
Amara bifrons (Gyllenhal, 1810)	18.vi.2014	pitfall trap	LI
Amara familiaris (Duftschmid, 1812)	18.iv.2013	pitfall trap	LI
Amara fulvipes (Audinet-Serville, 1821)	21.v.2014	hand collecting	LI
Amara chaudoiri incognita Fassati, 1946	30.iv.2014	pitfall trap	LI
Amara saphyrea Dejean, 1828	7.v.2014	pitfall trap	LI
Amara similata (Gyllenhal, 1810)	19.vii.2013	pitfall trap	LI
Amblystomus niger (Heer, 1841)	4.vi.2014	pitfall trap	LI
Anchomenus dorsalis (Pontoppidan, 1763)	17.v.2013	pitfall trap	LI
Anisodactylus signatus (Panzer, 1796)	21.vi.2013	pitfall trap	LI
Bembidion articulatum (Panzer, 1796)	21.vi.2013	blacklight	LI
Bembidion inoptatum Schaum, 1857	21.vi.2013	blacklight	LI
Bembidion lunulatum (Geoffroy, 1785)	21.vi.2013	blacklight	LI
Bembidion minimum (Fabricius, 1792)	21.vi.2013	blacklight	LI
Bembidion properans (Gyllenhal, 1810)	11.vi.2014	pitfall trap	LI
Bembidion varium (Olivier, 1795)	21.vi.2013	blacklight	LI
Calathus fuscipes (Goeze, 1777)	24.v.2013, 21.vi.2013, 20.viii.2014, 11.vi.2014, 28.v.2014, 4.vi.2014	pitfall trap	LI
Calosoma inquisitor (Linnaeus, 1758)	7.v.2014	pitfall trap	LI
Carabus coriaceus Linnaeus, 1758	9.vii.2014, 23.iv.2014	pitfall trap	LI
Carabus nemoralis Müller,1764	9.iv.2014, 2.iv.2014, 30.iv.2014	pitfall trap	LI

Carabus scheidleri Panzer, 1799	24.v.2013, 30.iv.2014, 7.v.2014, 8.vi.2015	pitfall trap, hand collecting	LI
Carabus ullrichii Germar, 1824	9.iv.2013, 7.v.2014	pitfall trap	LI
Carabus violaceus Linnaeus, 1758	13.vi.2013, 30.iv.2014, 17.vi.2015	pitfall trap	LI
Demetrias atricapillus (Linnaeus, 1758)	19.iv.2013	sweeping	LI
Dromius quadrimaculatus (Linnaeus,1758)	13.vi.2013	hand collecting	LI
Dyschiriodes aeneus (Dejean, 1825)	21.vi.2013	blacklight	LI
Harpalus atratus Latreille, 1804	31.v.2013, 6.vi.2013, 21.v.2014, 11.vi.2014, 30.vii.2014, 9.iv.2014, 2.iv.2014	pitfall trap	LI
Harpalus caspius (Steven, 1806)	5.v.2015	pitfall trap	LI
Harpalus distinguendus (Duftschmid, 1812)	18.iv.2013	sweeping	LI
Harpalus pumilus Sturm, 1818	28.v.2014	pitfall trap	LI
Harpalus subcylindricus Dejean, 1829	11.vi.2014, 4.vi.2014	pitfall trap	LI
Harpalus tardus (Panzer, 1797)	31.v.2013, 23.iv.2014, 27.iv.2015	pitfall trap, hanging trap	LI
Lebia cruxminor (Linnaeus, 1758)	19.iv.2013, 18.iv.2013	sweeping	LI
Leistus ferrugineus (Linnaeus, 1758)	27.viii.2014, 18.vi.2014, 11.vi.2014	pitfall trap	LI
Leistus rufomarginatus (Duftschmid, 1812)	6.vi.2013, 13.vi.2013, 28.v.2014, 21.v.2014	pitfall trap	LI
Limodromus assimilis (Paykull, 1790)	28.iii.2014	pitfall trap	LI
Microlestes maurus (Sturm, 1827)	19.iv.2013, 4.vii.2013	pitfall trap	LI
Microlestes minutulus (Goeze, 1777)	19.iv.2013, 4.vii.2013, 30.iv.2014	pitfall trap	LI
Nebria brevicollis (Fabricius, 1792)	31.v.2013, 28.v.2014, 30.iv.2014, 27.viii.2014	pitfall trap, hand collecting	LI
Notiophilus rufipes Curtis, 1829	16.iv.2014, 30.iv.2014, 7.v.2014, 5.v.2015, 27.iv.2015, 17.vi.2015	pitfall trap	LI
Ophonus diffinis (Dejean, 1829)	21.vi.2013	blacklight	LI
Ophonus rufibarbis (Fabricius, 1792)	21.vi.2013	blacklight	LI
Ophonus rupicola (Sturm, 1818)	21.vi.2013	blacklight	LI
Panagaeus bipustulatus (Fabricius, 1775)	27.iv.2015	pitfall trap	LI
Paratachys bistriatus (Duftschmid, 1812)	21.vi.2013	blacklight	LI
Pseudoophonus rufipes (De Geer, 1774)	17.v.2013, 31.v.2013, 11.vi.2014	pitfall trap, sweeping	LI
Pterostichus melanarius (Illiger, 1798)	14.vii.2015	pitfall trap	LI
Pterostichus melas (Creutzer, 1799)	29.vii.2013, 24.v.2013, 6.viii.2014,, 16.vii.2014	pitfall trap	LI
Pterostichus oblongopunctatus (Fabricius, 1787)	28.v.2014, 2.iv.2014	pitfall trap	LI
Pterostichus ovoideus (Sturm, 1824)	24.v.2013, 18.vi.2014, 16.vii.2014	pitfall trap	LI
Tachyta nana nana (Gyllenhal, 18010)	2.vii.2014	pitfall trap	LI
Trechus quadristriatus (Schrank, 1781)	21.vi.2013, 28.v.2014, 11.vi.2014, 27.viii.2014	pitfall trap	LI
Bembidion articulatum (Panzer, 1796)	21.vi.2013	blacklight	LI

Cerambycidae

Agapanthia villosoviridescens (De Geer, 1775)	13.vi.2013	hand collecting	LI
Agapanthia cardui (Linnaeus, 1767)	7.v.2014	sweeping	LI
Alosterna tabacicolor (De Geer, 1775)	13.vi.2013, 31.v.2013, 17.v.2013, 24.v.2013, 21.v.2014, 5.v.2015	sweeping	LI
Anaglyptus mysticus (Linnaeus, 1758)	17.v.2013, 9.v.2013, 7.v.2014	beating, sweeping	LI
Anastrangalia sanguinolenta (Linnaeus, 1761)	24.v.2013, 6.vi.2013, 4.vi.2014	sweeping, beating	LI
Carinatodorcadion aethiops (Scopoli, 1763)	3.v.2013, 7.v.2014	hand collecting	LI
Carinatodorcadion fulvum (Scopoli, 1763)	7.v.2014	hand collecting	LI
Cerambyx scopolii Fuessly, 1775	17.v.2013	hand collecting	LI
Cortodera humeralis (Schaller, 1783)	17.v.2013	beating	LI
Dinoptera collaris (Linnaeus, 1758)	17.v.2013, 7.v.2014	sweeping	LI
Exocentrus adspersus Mulsant, 1846	21.vi.2013, 13.vi.2013, 6.vi.2013	beating	LI
Exocentrus lusitanus (Linnaeus, 1767)	6.vi.2013, 13.vi.2013	beating	LI
Glaphyra umbellatarum (Schreber, 1759)	17.v.2013, 6.vi.2013, 24.v.2013	beating	LI
Grammoptera ruficornis (Fabricius, 1781)	9.v.2013, 24.v.2013, 6.vi.2013, 17.v.2013	beating, sweeping	LI
Grammoptera ustulata (Schaller, 1783)	5.v.2015	beating	LI
Chlorophorus sartor (O.F. Müller, 1766)	16.vii.2014	sweeping	LI
Chlorophorus varius (Muller, 1766)	14.vii.2015	sweeping	LI
Mesosa nebulosa (Fabricius, 1781)	17.v.2013	beating	LI
Molorchus minor (Linnaeus, 1758)	30.iv.2014, 25.v.2015	beating	LI
Obrium brunneum (Fabricius, 1792)	6.vi.2013, 9.v.2013	beating	LI
Pachytodes erraticus (Dalman, 1817)	13.vi.2013, 6.vi.2013, 4.vi.2014, 17.vi.2015	sweeping	LI
Paracorymbia maculicornis (De Geer, 1775)	18.v.2013, 21.v.2014, 7.v.2014	sweeping	LI
Pedestredorcadion pedestre (Poda, 1761)	9.v.2013, 7.v.2014, 30.iv.2014	hand collecting	LI
Phytoecia icterica (Schaller, 1783)	7.v.2014	sweeping	LI
Phytoecia pustulata (Schrank, 1776)	30.iv.2014, 24.iv.2014	sweeping	LR:nt
Plagionotus floralis (Pallas, 1776)	6.viii.2014	sweeping	LI
Poecilium alni (Linnaeus, 1767)	9.v.2013	beating	LI
Pogonocherus hispidulus (Piller et Mitterpacher, 1783)	26.iv.2013, 4.vi.2014	beating	LI
Pogonocherus hispidus (Linnaeus, 1758)	9.v.2013, 26.iv.2013, 7.v.2014	beating	LI
Prionus coriarius (Linnaeus, 1758)	12.vii.2013, 4.vii.2013, 2.vii.2014	pitfall trap, hand collecting	VU
Pseudovadonia livida (Fabricius, 1776)	13.vi.2013, 4.vi.2014	sweeping	LI
Rhagium inquisitor Linnaeus, 1758	17.v.2013	hand collecting	LI
Rutpela maculata (Poda, 1761)	6.vi.2013, 17.vi.2015	sweeping	LI
Spondylis buprestoides (Linnaeus, 1758)	21.vi.2013	hand collecting	LI

Stenopterus rufus Linnaeus, 1767	13.vi.2013, iv.vi.2014	sweeping	LI
Stenostola dubia (Laicharting, 1784)	5.v.2015	hand collecting	LI
Stenurella bifasciata (Muller, 1776)	12.vii.2013, 21.vi.2013	sweeping	LI
Stenurella melanura (Linnaeus, 1758)	13.vi.2013, 21.vi.2013, 6.vi.2013, 12.vii.2013, 18.vi.2014	sweeping, beating	LI
Stenurella nigra (Linnaeus, 1758)	13.vi.2013, 17.v.2013, 21.v.2014	sweeping	LI
Stictoleptura rubra (Linnaeus, 1758)	1.vii.2015	hand collecting	LI
Tetrops praeustus (Linnaeus, 1758)	3.v.2013, 9.v.2013, 9.iv.2014	beating	LI
Cerylonidae			
Cerylon histeroides (Fabricius, 1792)	6.vi.2013	pitfall trap	LI
Ciidae			
Cis boleti (Scopoli, 1763)	16.iv.2014	pitfall trap	LI
Cleridae			
Clerus mutillarius Fabricius, 1775	17.v.2013	hand collecting	LI
Thanasimus formicarius (Linnaeus, 1758)	6.vi.2013	hand collecting	LI
Tilloidea unifasciata (Fabricius, 1787)	31.v.2013	hand collecting	LI
Trichodes apiarius (Linnaeus, 1758)	19.vii.2013	sweeping	LI
Coccinellidae			
Adalia decempunctata (Linnaeus, 1758)	9.v.2013, 23.iv.2014	sweeping	LI
Aphidecta obliterata (Linnaeus, 1758)	13.vi.2013	beating	LI
Calvia quatuordecimguttata Linnaeus, 1758	26.iv.2013, 23.iv.2014	beating	LI
Coccinella septempunctata Linnaeus, 1758	26.iv.2013	sweeping	LI
Coccinula quatuordecimpustulata (Linnaeus, 1758)	18.iv.2013	sweeping	LI
Exochomus quadripustulatus (Linnaeus, 1758)	19.vii.2013, 12.vii.2013, 2.iv.2014, 13.iv.2013	beating	LI
Harmonia axyridis (Pallas, 1773)	21.vi.2013, 13.vi.2013, 26.iv.2013, 17.v.2013, 9.v.2013	beating	LI
Hippodamia variegata (Goeze, 1777)	2.iv.2014	sweeping	LI
Hyperaspis reppensis (Herbst, 1783)	24.v.2013, 13.vi.2013	sweeping	LI
Chilocorus bipustulatus (Linnaeus, 1758)	2.iv.2014	beating	LI
Nephus quadrimaculatus (Herbst, 1783)	9.v.2013, 19.iv.2013	sweeping	LI
Platynaspis luteorubra (Goeze, 1777)	7.v.2014	sweeping	LI
Propylea quatuordecimpunctata (Linnaeus, 1758)	26.iv.2013, 2.iv.2014	sweeping	LI
Psyllobora vigintiduopunctata (Linnaeus, 1758)	28.iii.2014, 16.iv.2014	sweeping	LI
Scymnus femoralis (Gyllenhal, 1827)	17.v.2014	sweeping	LI
Scymnus frontalis (Fabricius, 1787)	18.iv.2013, 30.iv.2014	sweeping	LI
Cryptophagidae			
Atomaria fuscata (Schonherr, 1808)	6.vi.2013, 2.vii.2014	pitfall trap	LI
Cryptophagus dentatus (Herbst, 1793)	9.iv.2014	pitfall trap	LI
Cryptophagus lycoperdi (Scopoli, 1763)	21.vi.2013	pitfall trap	LI
Cryptophagus nitidulus Miller, 1858	9.iv.2014	pitfall trap	LI

Cryptophagus pallidus Sturm, 1845	27.viii.2014, 21.vi.2013, 9.iv.2014	pitfall trap	LI
Cryptophagus pilosus Gyllenhal, 1827	16.iv.2014	pitfall trap	LI
Cryptophagus schmidti Sturm, 1845	9.iv.2014, 27.viii.2014	pitfall trap	LI
Curculionidae			
Anthonomus pedicularius (Linnaeus, 1758)	9.v.2013, 26.iv.2013, 2.iv.2014	beating	LI
Anthonomus pomorum (Linnaeus, 1758)	17.v.2013, 26.iv.2013, 4.vi.2014, 28.v.2014, 23.iv.2014	beating	LI
Anthonomus rectirostris (Linnaeus, 1758)	24.v.2013	beating	LI
Anthonomus rubi (Herbst, 1795)	18.vi.2014	beating	LI
Acallocrates colonnellii Bahr, 2003	17.v.2013, 13.vi.2013	beating	LI
Archarius pyrrhoceras (Marsham, 1802)	24.v.2013, 4.vi.2014, 23.iv.2014	beating	LI
Archarius salicivorus (Paykull, 1792)	26.iv.2013	beating	LI
Barypeithes pellucidus (Boheman, 1834)	6.vi.2013, 31.v.2013, 30.iv.2014, 11.vi.2014, 7.v.2014	pitfall trap	LI
Barypeithes mollicomus (Ahrens, 1812)	31.v.2013, 9.vii.2014	pitfall trap	LI
Ceutorhynchus obstrictus (Marsham, 1802)	26.iv.2013, 21.vi.2013, 12.vii.2013, 19.vii.2013, 4.vii.2013, 3.v.2013, 2.vii.2014, 7.v.2014, 30.iv.2014, 23.iv.2014	sweeping	LI
Ceutorhynchus pallidactylus (Marsham, 1802)	9.vii.2014	sweeping	LI
Ceutorhynchus scrobicollis Neresheimer et Wagner, 1924	21.v.2014	sweeping	LI
Coryssomerus capucinus (Beck, 1817)	30.iv.2014	sweeping	LI
Curculio glandium Marsham, 1802	9.v.2013, 26.iv.2013, 17.v.2013, 6.vi.2013, 13.vi.2013, 24.v.2013, 4.vii.2013, 21.vi.2013, 23.iv.2014, 2.vii.2014, 30.iv.2014	beating	LI
Curculio nucum Linnaeus, 1758	9.v.2013, 21.vi.2013	beating	LI
Curculio pellitus (Boheman, 1843)	28.v.2014, 4.vi.2014	beating	LI
Curculio venosus (Gravenhorst, 1807)	3.v.2013, 21.vi.2013, 24.v.2013, 13.vi.2013, 4.vii.2013, 23.iv.2014	beating	LI
Curculio villosus Fabricius, 1781	21.vi.2013	beating	LI
Cyphocleonus trisulcatus (Herbst, 1795)	18.iv.2013, 2.vii.2014, 2.iv.2014, 16.vii.2014	hand collecting, pitfall trap	LI
Dorytomus dejeani Faust, 1882	9.v.2013, 6.vi.2013, 24.v.2013	beating	LI
Dorytomus melanophthalmus (Paykull, 1792)	24.v.2013	beating	LI
Dorytomus puberulus (Boheman, 1843)	11.vi.2014	beating	LI
Dorytomus taeniatus (Fabricius, 1781)	6.vi.2013, 24.v.2013, 21.v.2014	beating	LI
Dorytomus tortrix (Linnaeus, 1761)	9.v.2013	beating	LI

Dorytomus tremulae (Fabricius, 1787)	24.v.2013	beating	LI
Dorytomus villosulus (Gyllenhal, 1836)	6.vi.2013, 24.v.2013	beating	LI
Eusomus ovulum Germar, 1824	9.v.2013, 17.v.2013, 24.v.2013, 21.vi.2013, 4.vii.2013	sweeping	LI
Glocianus distinctus (C. Brisout, 1870)	4.vii.2013, 16.vii.2014	sweeping	LI
Glocianus punctiger (C. R. Sahlberg, 1835)	9.v.2013, 26.iv.2013	sweeping	LI
Hylobius abietis (Linnaeus, 1758)	24.v.2013	beating	LI
Hypera meles (Fabricius, 1792)	18.iv.2013, 30.iv.2014	sweeping	LI
Hypera plantaginis (De Geer, 1775)	21.vi.2013, 17.v.2013	sweeping	LI
Hypera postica (Gyllenhal, 1813)	21.v.2014	sweeping	LI
Hypera striata (Boheman, 1834)	6.vi.2013	sweeping	LI
Larinus obtusus Gyllenhal, 1835	21.vi.2013, 24.v.2013, 16.vii.2014, 11.vi.2014	sweeping	LI
Larinus planus (Fabricius, 1792)	7.v.2014, 30.iv.2014	sweeping	LI
Larinus turbinatus Gyllenhal, 1835	17.v.2013, 9.v.2013, 30.iv.2014, 21.v.2014, 7.v.2014	sweeping	LI
Liophloeus tessulatus (Muller, 1776)	9.v.2013, 13.vi.2013, 21.v.2014, 30.iv.2014, 23.iv.2014, 27.iv.2015, 11.v.2015	hand collecting, pitfall trap	LI
Lixus bardanae (Fabricius, 1787)	21.vi.2013	sweeping	LI
Lixus punctiventris Boheman, 1835	30.iv.2014	hand collecting	LI
Lixus subtilis Boheman, 1835	18.iv.2013	sweeping	LI
Magdalis armigera (Geoffroy, 1785)	6.vi.2013, 17.v.2013	beating	LI
Magdalis cerasi (Linnaeus, 1758)	24.v.2013, 28.v.2014, 4.vi.2014	beating	LI
Magdalis flavicornis (Gyllenhal, 1836)	24.v.2013	beating	LI
Magdalis fuscicornis (Desbrochers, 1870)	9.v.2013	beating	LI
Magdalis rufa Germar, 1824	6.vi.2013	beating	LI
Magdalis ruficornis (Linnaeus, 1758)	17.v.2013	beating	LI
Mecaspis alternans (Herbst, 1795)	30.iv.2014	hand collecting	LI
Mecinus labilis (Herbst, 1795)	4.vii.2013	sweeping	LI
Mecinus pyraster (Herbst, 1795)	4.vii.2013, 18.iv.2013, vii.v.2014, 16.vii.2014	sweeping	LI
Nedyus quadrimaculatus (Linnaeus, 1758)	3.v.2013, 18.iv.2013, 26.iv.2013, 9.iv.2014	sweeping	LI
Omias rotundatus (Fabricius, 1792)	18.iv.2013	sweeping	LI
Orchestes pilosus (Fabricius, 1781)	6.vi.2013	beating	LI
Orchestes subfasciatus Gyllenhal, 1835	6.vi.2013	beating	LI
Otiorhynchus fullo (Schrank, 1781)	26.iv.2013, 9.v.2013, 9.vii.2014, 23.iv.2014, 21.v.2014, 11.v.2015	beating	LI
Otiorhynchus ligustici (Linnaeus, 1758)	13.vi.2013, 24.v.2013, 7.v.2014	hand collecting, pitfall trap	LI
Otiorhynchus orbicularis (Herbst, 1795)	24.v.2013, 21.v.2014	hand collecting	LI
Otiorhynchus raucus (Fabricius, 1777)	30.vii.2014, 2.vii.2014, 9.vii.2014, 8.vi.2015	pitfall trap	LI

Otiorhynchus singularis (Linnaeus, 1767)	6.vi.2013, 13.vi.2013	beating	LI
Paophilus afflatus (Boheman, 1833)	21.vi.2013, 7.v.2014	sweeping	LI
Phyllobius argentatus (Linnaeus, 1758)	6.vi.2013, 17.v.2013, 23.iv.2014, 30.iv.2014, 5.v.2015, 11.v.2015	beating	LI
Phyllobius betulinus (Bechstein et Scharfenberg, 1805)	9.v.2013, 17.v.2013	beating	LI
Phyllobius glaucus (Scopoli, 1763)	9.v.2013	beating	LI
Phyllobius maculicornis Germar, 1824	30.iv.2014, 7.v.2015	beating	LI
Phyllobius oblongus (Linnaeus, 1758)	9.v.2013, 17.v.2013, 30.iv.2014	beating	LI
Phyllobius pyri (Linnaeus, 1758)	26.iv.2013, 9.v.2013, 6.vi.2013, 3.v.2013, 2.iv.2014	beating	LI
Phyllobius thalassinus Gyllenhal, 1834	7.v.2014, 18.v.2015	beating	LI
Pityogenes chalcographus (Linnaeus, 1761)	21.vi.2013	beating	LI
Polydrusus cervinus (Linnaeus, 1758)	5.v.2015	beating	LI
Polydrusus formosus (Mayer, 1779)	24.v.2013	beating	LI
Polydrusus impar Gozis, 1882	4.vi.2014, 21.v.2014, 30.iv.2014, 25.v.2015	beating	LI
Polydrusus marginatus Staphens, 1831	3.v.2013, 26.iv.2013, 24.v.2013, 6.vi.2013, 2.iv.2014, 30.iv.2014, 7.v.2014, 18.vi.2014, 9.iv.2014, 23.iv.2014	beating	LI
Polydrusus mollis (Ström, 1768)	5.v.2015	beating	LI
Polydrusus tereticollis (De Geer, 1775)	9.v.2013, 26.iv.2013, 18.iv.2013, 19.iv.2013, 23.iv.2014	beating	LI
Polydrusus viridicinctus Gyllenhal, 1834	13.vi.2013	beating	LI
Pseudocleonus cinereus (Schrank, 1781)	9.v.2013, 2.iv.2014	hand collecting	LI
Pseudorchestes ermischi (Dieckmann, 1958)	4.vii.2013	beating	LI
Rhamphus pulicarius (Herbst, 1795)	30.iv.2014	beating	LI
Rhinoncus pericarpius (Linnaeus, 1758)	18.iv.2013, 9.v.2013, 7.v.2014, 30.iv.2014, 9.iv.2014	sweeping	LI
Rhinoncus perpendicularis (Reich, 1797)	6.vi.2013	sweeping	LI
Rhinusa antirrhini (Paykull, 1800)	6.vi.2013	sweeping	LI
Rhinusa tetra (Fabricius, 1792)	2.vii.2014, 18.vi.2014	sweeping	LI
Rhyncolus sculpturatus Waltl, 1839	2.vii.2014	hand collecting	LI
Sciaphilus asperatus (Bonsdorff, 1785)	30.iv.2014	sweeping	LI
Scolytus carpini (Ratzeburg, 1837)	4.vi.2014	beating	LI
Scolytus mali (Bechstein, 1805)	21.vi.2013	hanging trap	LI
Smicronyx jungermanniae Schoenherr, 1843	16.vii.2014	sweeping	LI
Smicronyx smreczynskii Solari, 1952	21.v.2014	sweeping	LI
Sitona ambiguus Gyllenhal, 1834	26.iv.2013	sweeping	LI
Sitona hispidulus (Fabricius, 1776)	26.iv.2013, 18.iv.2013	sweeping	LI
Sitona humeralis Stephens, 1831	30.iv.2014	sweeping	LI
Sitona lepidus Gyllenhal, 1834	19.vii.2013	sweeping	LI

Sitona lineatus (Linnaeus, 1758)	18.iv.2013, 19.iv.2013, 6.vi.2013, 4.vii.2013, 19.vii.2013, 16.vii.2014, 30.iv.2014	sweeping	LI
Sitona macularius (Marsham, 1802)	18.iv.2013,	sweeping	LI
Sitona striatellus Gyllenhal, 1834	21.vi.2013	sweeping	LI
Sitona sulcifrons (Thunberg, 1798)	24.v.2013, 12.vii.2013, 30.iv.2014, 7.v.2014	sweeping	LI
Sitona suturalis Stephens, 1831	21.vi.2013	sweeping	LI
Sitona waterhousei Walton, 1846	9.v.2013, 21.vi.2013, 19.vii.2013, 7.v.2014, 11.vi.2014, 16.vii.2014	sweeping	LI
Stenocarus ruficornis (Stephens, 1831)	19.vii.2013	hand collecting	LI
Stereonychus fraxini (De Geer, 1775)	6.vi.2013	beating	LI
Tanymecus palliatus (Fabricius, 1787)	21.vi.2013, 6.vi.2013, 9.v.2013	sweeping	LI
Trichosirocalus troglodytes (Fabricius, 1787)	4.vii.2013, 19.vii.2013, 7.v.2014	sweeping	LI
Tychius cuprifer (Panzer, 1759)	21.v.2014, 30.iv.2014	sweeping	LI
Tychius picirostris (Fabricius, 1787)	4.vi.2014, 30.iv.2014	sweeping	LI
Tychius pumilus Ch. Brisout, 1862	4.vii.2013	sweeping	LI
Tychius quinquepunctatus (Linnaeus, 1758)	21.vi.2013, 4.vii.2013, 12.vii.2013, 19.vii.2013, 16.vii.2014	sweeping	LI
Xyleborus germanus (Blandfort, 1894)	5.v.2015	beating	LI
Xyleborus monographus (Fabricius, 1792)	4.vi.2014	beating	LI
Zacladus exiguus (Olivier, 1807)	13.vi.2013	sweeping	LI
Dermestidae			
Anthrenus scrophulariae (Linnaeus, 1758)	7.v.2014	sweeping	LI
Anthrenus verbasci (Linnaeus, 1767)	28.iv.2014	sweeping	LI
Attagenus pellio (Linnaeus, 1758)	21.v.2014	sweeping	LI
Dermestes laniarius Illiger, 1801	28.iii.2014, 28.v.2014, 11.vi.2014	pitfall trap, hand collecting	LI
Dytiscidae			
Acilius sulcatus (Linnaeus, 1758)	18.iv.2013, 20.iv.2013	hand collecting	LI
Colymbetes fuscus (Linnaeus, 1758)	5.v.2015	hand collecting	LI
Dytiscus marginalis Linnaeus, 1758	15.v.2013, 13.iv.2013	hand collecting	LI
Hydroporus angustatus Sturm, 1835	18.iv.2013	hand collecting	LI
Hydroporus palustris (Linnaeus, 1761)	18.iv.2013	hand collecting	LI
Hyphydrus ovatus (Linnaeus, 1761)	18.iv.2013, 23.iv.2014	hand collecting	LI
Ilybius fuliginosus (Fabricius, 1792)	21.vi.2013	blacklight	LI
Laccophilus minutus (Linnaeus, 1758)	18.iv.2013, 23.iv.2014	hand collecting	LI
Elateridae			
Adrastus rachifer (Fourcroy,1785)	13.vi.2013, 4.vii.2013, 16.vii.2014, 6.vii.2013	beating, sweeping	LI
Agriotes acuminatus (Stephens, 1830)	9.v.2013, 13.vi.2013, 21.v.2014, 4.vi.2014	sweeping	LI
Agriotes pilosellus (Achonherr, 1817)	27.iv.2015	beating	LI

Agriotes sputator (Linnaeus, 1758)	27.iv.2013, 13.vi.2013, 9.vi.2013, 4.vii.2013, 19.iv.2013, 18.iv.2013, 21.vi.2013, 9.v.2013	sweeping	LI
Agriotes ustulatus (Schaller, 1783)	12.vii.2013, 4.vii.2013, 19.vii.2013, 6.vii.2013	sweeping	LI
Agrypnus murinus (Linnaeus, 1758)	23.iv.2014	beating	LI
Ampedus elongatulus (Fabricius, 1787)	30.iv.2014	beating	LI
Ampedus pomorum (Herbst, 1784)	4.vi.2014, 2.iv.2014	beating, hand collecting	LI
Ampedus rufipennis (Stephens, 1830)	13.vi.2013	beating	LI
Ampedus sanguineus (Linnaeus, 1758)	20.iv.2015	beating	LI
Ampedus sinuatus Germar, 1844	9.v.2013, 17.v.2013, 9.iv.2014	beating	LI
Athous bicolor (Goeze, 1777)	21.vi.2013, 4.vii.2013, 14.vii.2015, 9.vii.2014, 17.vi.2015	beating, hanging trap	LI
Athous haemorrhoidalis (Fabricius, 1801)	9.v.2013, 13.vi.2013, 3.v.2013, 23.iv.2014, 20.iv.2013	beating, sweeping	LI
Athous vittatus (Gmelin, 1790)	9.v.2013, 17.v.2013, 23.iv.2014, 3.v.2013, 24.v.2013	beating	LI
Cidnopus pilosus (Leske, 1785)	17.v.2013, 9.v.2013, 26.iv.2013, 13.vi.2013, 27.iv.2013	sweeping	LI
Hemicrepidius hirtus (Herbst, 1784)	13.vi.2013, 19.vii.2013, 21.vi.2013	beating	LI
Limonius poneli Leseigneur et Mertlik, 2007	26.iv.2013, 18.iv.2013, 27.iv.2013, 9.iv.2014	beating	LI
Melanotus crassicollis (Erichson, 1841)	6.vii.2013	hand collecting	LI
Melanotus punctolineatus (Pelerin, 1829)	30.iv.2014	beating	LI
Melanotus villosus (Fourcroy, 1785)	17.v.2013, 21.vi.2013, 23.iv.2014	beating, blacklight	LI
Nothodes parvulus (Panzer, 1799)	9.v.2013, 26.iv.2013, 3.v.2013, 13.vi.2013	beating	LI
Porthmidius austriacus (Schrank, 1781)	17.v.2013	beating	LI
Prosternon tessellatum (Linnaeus, 1758)	9.v.2013, 13.vi.2013	beating	LI
Selatosomus latus (Fabricius, 1801)	30.iv.2014	beating	LI
Stenagostus rufus (De Geer, 1774)	26.iv.2013 (larva)	hand collecting	VU
Synaptus filiformis (Fabricius, 1781)	9.v.2013, 21.vi.2013	beating	LI
Endomychidae			
Lycoperdina succincta (Linnaeus, 1767)	6.viii.2014	hand collecting	LI
Erotylidae			
Dacne bipustulata (Thunberg, 1781)	23.iv.2014, 30.iv.2014, 25.v.2015	pitfall trap	LI
Triplax lepida (Faldermann, 1837)	17.v.2013, 16.vii.2014	pitfall trap	LI
Tritoma bipustulata (Fabricius, 1775)	28.v.2014, 16.iv.2014	pitfall trap	LI
Eucnemidae			
Melasis buprestoides (Linnaeus, 1761)	9.v.2013	beating	LI

Gyrinidae			
Gyrinus substriatus Stephens, 1829	18.iv.2013, 9.iv.2014, 2.iv.2014, 23.iv.2014	hand collecting	LI
Haliplidae			
Peltodytes caesus (Duftschmid, 1805)	18.iv.2013	hand collecting	LI
Helophoridae			
Helophorus asperatus Rey, 1885	21.vi.2013	blacklight	LI
Helophorus minutus Fabricius, 1775	21.vi.2013	blacklight	LI
Heteroceridae			
Heterocerus fenestratus (Thunberg, 1784)	21.vi.2013	blacklight	LI
Heterocerus fusculus Kiesenwetter, 1843	21.vi.2013	blacklight	LI
Histeridae			
Atholus corvinus (Germar, 1817)	8.vi.2015	pitfall trap	LI
Eurosomides minor (Rossi, 1792)	6.vi.2013	hand collecting	LI
Margarinotus ruficornis (Grimm, 1852)	29.vii.2013, 5.v.2015	pitfall trap	LI
Paromalus flavicornis (Herbst, 1792)	2.vii.2014	pitfall trap	LI
Paromalus parallelepipedus (Herbst, 1792)	2.iv.2014	pitfall trap	LI
Plegaderus caesus (Herbst, 1792)	26.vii.2013	pitfall trap	LI
Hydrophilidae			
Anacaena lutescens (Stephens, 1829)	21.vi.2013	blacklight	LI
Cercyon marinus Thomson, 1853	21.vi.2013	blacklight	LI
Enochrus bicolor (Fabricius, 1792)	21.vi.2013	blacklight	LI
Enochrus nigritus (Sharp, 1872)	21.vi.2013	blacklight	LI
Enochrus ochropterus (Marsham, 1802)	21.vi.2013	blacklight	LI
Enochrus quadripunctatus (Herbst, 1797)	21.vi.2013	blacklight	LI
Enochrus testaceus (Fabricius, 1801)	21.vi.2013	blacklight	LI
Hydrobius fuscipes (Linnaeus, 1758)	21.vi.2013	blacklight	LI
Hydrophilus piceus (Linnaeus, 1758)	21.vi.2013	blacklight	VU
Laccobius bipunctatus (Fabricius, 1775)	18.iv.2013	pitfall trap	LI
Chrysomelidae			
Acanthoscelides pallidipennis (Motschulsky, 1873)	29.vii.2013, 26.iv.2014	beating	LI
Bruchidius ater (Marsham, 1802)	13.vi.2013, 18.vi.2014, 9.iv.2014	beating	LI
Bruchidius siliquastri Delobel, 2007	19.iv.2013, 23.iv.2013	hand collecting	LI
Bruchidius varius (Olivier, 1795)	30.vii.2014, 25.v.2015	sweeping	LI
Bruchus affinis Frölich, 1799	9.v.2013, 13.vi.2013, 4.vii.2013	sweeping	LI
Bruchus atomarius (Linnaeus, 1761)	30.iv.2014, 7.v.2014	sweeping	LI
Bruchus luteicornis Illiger, 1794	26.iv.2013, 27.iv.2015	sweeping	LI
Bruchus occidentalis Lukjanovitch et Ter-Minassian, 1957	23.iv.2014	sweeping	LI
Cassida atrata Fabricius, 1787	4.vii.2013	sweeping	LR:nt
Cassida denticollis Suffrian, 1844	19.vii.2013, 4.vii.2013	sweeping	LI
Cassida prasina Illiger, 1798,	18.iv.2013, 4.vi.2014	sweeping	LR:nt
Cassida sanguinolenta O.F. Muller, 1776	18.iv.2013, 21.vi.2013	sweeping	LI

Cassida sanguinosa Suffrian, 1844	7.v.2014	sweeping	LI
Cassida stigmatica Suffrian, 1844	21.v.2014	sweeping	LI
Clytra laeviuscula Ratzeburg, 1837	6.vi.2013	hand collecting	LI
Crioceris quinquepunctata (Scopoli, 1763)	19.vii.2013, 29.vii.2013	hand collecting	LI
Cryptocephalus bilineatus (Linnaeus, 1767)	12.vii.2013, 16.vii.2014	sweeping	LI
Cryptocephalus bipunctatus (Linnaeus, 1758)	6.vi.2013, 13.vi.2013, 11.vi.2014	sweeping	LI
Cryptocephalus connexus G. A. Olivier, 1807	12.vii.2013, 2.vii.2014, 16.vii.2014	beating	LI
Cryptocephalus transiens Franz, 1949	13.vi.2013, 21.v.2014, 4.vi.2014, 17.vi.2015	sweeping	LI
Cryptocephalus labiatus (Linnaeus, 1761)	2.vii.2014, 4.vi.2014	beating, sweeping	LI
Cryptocephalus moraei (Linnaeus, 1758)	6.vi.2013, 24.v.2013, 11.vi.2014, 17.vi.2015	sweeping	LI
Cryptocephalus nitidus (Linnaeus, 1758)	31.v.2013	beating	LI
Cryptocephalus ocellatus Drapiez, 1819	13.vi.2013	beating	LI
Cryptocephalus sericeus (Linnaeus, 1758)	4.vii.2013, 2.vii.2014	sweeping	LI
Galeruca pomonae (Scopoli, 1763)	12.vii.2013	sweeping	LI
Galeruca tanaceti (Linnaeus, 1758)	6.vi.2013	sweeping	LI
Galerucella aquatica (Geoffroy, 1785)	1.vii.2015	beating	LI
Galerucella tenella (Linnaeus, 1761)	29.vii.2013, 19.vii.2013	beating	LI
Gastrophysa polygoni (Linnaeus, 1758)	18.iv.2013, 19.iv.2013	sweeping	LI
Hispa atra Linnaeus, 1767	18.iv.2013	sweeping	LI
Hydrothassa marginella (Linnaeus, 1758)	18.iv.2013	sweeping	LI
Hypocassida subferruginea (Schrank, 1776)	6.vi.2013, 21.vi.2013, 19.vii.2013, 4.vii.2013, 7.v.2014	sweeping	LI
Chrysolina limbata (Fabricius, 1775)	28.v.2014	hand collecting	LI
Chrysolina marginata (Linnaeus, 1758)	18.iv.2013, 21.v.2014	sweeping	LI
Chrysolina oricalcia (Muller O. F., 1776)	13.vi.2013	sweeping	LI
Chrysolina sturmi (Westhoff, 1882)	3.v.2013, 9.vii.2014	hand collecting	LI
Chrysomela populi Linnaeus, 1758	5.v.2015	beating	LI
Chrysomela vigintipunctata (Scopoli, 1763)	18.vi.2013	beating	LI
Labidostomis longimana (Linnaeus, 1760)	21.vi.2013, 4.vii.2013, 12.vii.2013, 13.vi.2013, 2.vii.2014, 16.vii.2014, 11.vi.2014	sweeping	LI
Lema cyanella (Linnaeus, 1758)	18.iv.2013	sweeping	LI
Oulema gallaeciana (Heyden, 1879)	21.v.2014, 30.iv.2014	sweeping	LI
Oulema melanopus (Linnaeus, 1758)	12.iv.2013	sweeping	LI
Pachybrachis fimbriolatus Suffrian, 1848	21.v.2014	sweeping	LI
Smaragdina affinis (Illiger, 1794)	4.vii.2013, 9.iv.2014	beating	LI
Smaragdina aurita (Linnaeus, 1767)	17.v.2013	beating	LI
Smaragdina salicina (Scopoli, 1763)	9.v.2013, 23.iv.2014, 3.v.2015	beating	LI
Spermophagus calystegiae (Luk'yanovich et Ter-Minasyan, 1957)	9.v.2013	sweeping	LI

Laemophloeidae			
Laemophloeus monilis (Fabricius, 1787)	21.vi.2013	hand collecting	VU
Lampyridae			
Lampyris noctiluca (Linnaeus, 1767)	21.vi.2013	blacklight	LI
Latridiidae			
Cortinicara gibbosa (Herbst, 1793)	2.iv.2014	pitfall trap	LI
Enicmus histrio Joy et Tomlin, 1910	24.v.2013	pitfall trap	LI
Leiodidae			
Amphicyllis globiformis (Sahlberg, 1833)	4.vii.2013	pitfall trap	LI
Amphicyllis globus (Sahlberg, 1833)	31.v.2013, 29.vii.2013, 7.v.2014, 6.vi.2013	pitfall trap	LI
Catops coracinus Kellner, 1846	18.vi.2014, 11.vi.2014	pitfall trap	LI
Catops chrysomeloides (Panzer, 1798)	31.v.2013	pitfall trap	LI
Catops morio (Fabricius, 1787)	4.vi.2014	pitfall trap	LI
Catops picipes (Fabricius, 1787)	7.v.2014, 6.vi.2013, 21.v.2014	pitfall trap	LI
Choleva agilis (Illiger, 1798)	6.vi.2013	pitfall trap	LI
Colon serripes (C. R. Sahlberg, 1834)	28.v.2014	pitfall trap	LI
Nargus anisotomoides (Spence, 1813)	16.iv.2014	pitfall trap	LI
Ptomaphagus sericatus (Chaudoir, 1845)	16.iv.2014, 7.v.2014, 30.iv.2014, 2.iv.2014	pitfall trap	LI
Lucanidae			
Dorcus parallelipipedus (Linnaeus, 1785)	9.v.2013	hand collecting	LI
Lucanus cervus (Linnaeus, 1758)	21.vi.2013	pitfall trap	LR:1c
Lycidae			
Lygistopterus sanguineus (Linnaeus, 1758)	2.vii.2014	hand collecting	LI
Melandryidae			
Conopalpus testaceus (Olivier, 1790)	24.v.2013, 28.v.2014	beating	LI
Orchesia fasciata (Illiger, 1798)	1.vii.2015	beating	LI
Orchesia undulata Kraatz, 1853	28.v.2014	beating	LI
Osphya bipunctata (Fabricius, 1775)	9.v.2013, 26.iv.2013, 23.iv.2014	beating, pitfall trap	LI
Phloiotrya rufipes (Gyllenhal, 1810)	24.v.2013	beating	LI
Meloidae			
Lytta vesicatoria (Linnaeus, 1758)	16.vii.2013	hand collecting	LI
Meloe violaceus Marsham, 1802	3.v.2013	hand collecting	LI
Meloe proscarabaeus Linnaeus, 1758	23.iv.2014	hand collecting	LI
Melyridae			
Clanoptilus strangulatus (Abeille de Perrin, 1885)	30.iv.2014	sweeping	LI
Axinotarsus marginalis (Laporte de Castelnau, 1840)	11.vi.2014, 4.vi.2014, 21.v.2014	sweeping	LI
Axinotarsus ruficollis (Olivier, 1790)	12.vii.2013, 21.vi.2013	sweeping	LI
Dasytes aeratus Stephens, 1829	7.v.2014	sweeping	LI
Dasytes fusculus (Illiger, 1801)	23.iv.2014	sweeping	LI
Dasytes niger (Linnaeus, 1767)	9.v.2013	sweeping	LI
Dasytes obscurus (Gyllenhal, 1813)	23.iv.2014	sweeping	LI

Dasytes plumbeus (Muller, 1776)	2.vii.2014	beating	LI
Dasytes virens (Marsham, 1802)	9.v.2013, 3.v.2013	beating	LI
Dolichosoma lineare (Rossi, 1792)	24.v.2013	sweeping	LI
Charopus concolor (Fabricius, 1801)	30.iv.2014	sweeping	LI
Charopus flavipes (Paykull, 1798)	21.v.2014	sweeping	LI
Malachius bipustulatus (Linnaeus, 1758)	9.v.2013, 30.iv.2014	sweeping	LI
Monotomidae			
Rhizophagus bipustulatus (Fabricius, 1792)	9.iv.2014, 2.iv.2014, 16.iv.2014, 11.vi.2014	pitfall trap	LI
Rhizophagus fenestralis (Linnaeus, 1758)	9.iv.2014	pitfall trap	LI
Mycetophagidae			
Litargus connexus (Geoffroy, 1785)	2.iv.2014	hanging trap	LI
Mycetophagus decempunctatus Fabricius, 1801	21.vi.2013	pitfall trap	VU
Nitidulidae			
Cryptarcha strigata (Fabricius, 1787)	2.iv.2014, 9.iv.2014	pitfall trap	LI
Cryptarcha undata (Olivier, 1790)	13.vi.2013, 27.iv.2015	pitfall trap	LI
Epuraea aestiva (Linnaeus, 1758)	18.iv.2013, 2.iv.2014	pitfall trap	LI
Epuraea distincta (Grimmer, 1841)	23.iv.2014	pitfall trap	LI
Epuraea guttata (Olivier, 1811)	18.vi.2014	pitfall trap	LI
Epuraea longula Erichson, 1845	31.v.2013, 21.vi.2013	pitfall trap	LI
Epuraea melanocephala (Marsham, 1802)	13.vi.2013, 20.iii.2014	pitfall trap	LI
Epuraea pallescens (Stephens, 1835)	26.iv.2013	pitfall trap	LI
Epuraea unicolor (Olivier, 1790)	26.iv.2013, 16.iv.2014, 30.iv.2014, 23.iv.2014	pitfall trap	LI
Glischrochilus quadrisignatus (Say, 1835)	12.vii.2013, 31.v.2013, 18.iv.2013, 27.iv.2015	pitfall trap	LI
Lamiogethes brunnicornis (Sturm, 1845)	2.vii.2014	sweeping	LI
Meligethes aeneus (Fabricius, 1775)	26.iv.2013, 18.iv.2013	sweeping	LI
Nitidula rufipes (Linnaeus, 1767)	30.iv.2014	pitfall trap	LI
Pityophagus ferrugineus (Linnaeus, 1758)	18.vi.2014, 11.v.2015	pitfall trap	LI
Soronia grisea (Linnaeus, 1758)	6.vi.2013, 9.iv.2014	pitfall trap	LI
Stachygethes villosus (C. Brisout de Barneville, 1863)	2.vii.2014	pitfall trap	LI
Stelidota geminata (Say, 1825)	9.vii.2014, 18.vi.2014, 27.viii.2014	pitfall trap	LI
Thalycra fervida (Olivier, 1790)	28.v.2014	pitfall trap	LI
Oedemeridae			
Nacerdes carniolica (Gistel, 1834)	2.vii.2014	blacklight	LI
Oedemera femorata (Scopoli, 1763)	13.vi.2013	sweeping	LI
Oedemera lurida (Marsham, 1802)	24.v.2013, 4.vi.2014	sweeping	LI
Oedemera podagrariae (Linnaeus, 1767)	13.vi.2013, 6.vi.2013, 4.vi.2014, 8.vi.2015	sweeping	LI
Oedemera virescens (Linnaeus, 1767)	21.v.2014	sweeping	LI
Orsodacnidae			
Orsodacne cerasi (Linnaeus, 1758)	17.v.2013, 9.v.2013, 13.vi.2013, 26.iv.2013, 2.iv.2014, 23.iv.2014, 11.v.2015	beating	LI

Phalacridae			
Olibrus affinis (Sturm, 1807)	7.v.2014	pitfall trap	LI
Ptinidae			
Anobium punctatum (De Geer, 1774)	24.v.2013	beating	LI
Hedobia pubescens (Olivier, 1790),	17.v.2013, 30.iv.2014	beating	VU
Hyperisus plumbeum (Illiger, 1801)	5.v.2015	beating	LI
Ptinomorphus imperialis (Linnaeus, 1767)	3.v.2013, 23.iv.2014, 6.v.2015, 9.v.2015	beating	LI
Ptinomorphus regalis (Duftschmid, 1825)	26.iv.2013	beating	LI
Ptinus fur (Linnaeus, 1758)	2.iv.2014, 28.v.2014, 18.vi.2014, 9.vii.2014	beating	LI
Ptinus rufipes Olivier, 1790	9.v.2013, 13.vi.2013, 28.v.2014	beating	LI
Pyrochroidae			
Pyrochroa coccinea (Linnaeus, 1761)	30.iv.2014	hand collecting	LI
Salpingidae			
Salpingus planirostris (Fabricius, 1787)	30.vii.2014	pitfall trap	LI
Scarabaeidae			
Amphimallon solstitiale (Linnaeus, 1758)	21.vi.2013	blacklight	LI
Cetonia aurata (Linnaeus, 1761)	26.iv.2013	beating	LI
Holochelus aequinoctialis (Herbst, 1790)	28.iii.2014	hand collecting	VU
Onthophagus coenobita (Herbst, 1783)	4.vii.2013, 9.vii.2014, 28.v.2014, 4.vi.2014	hand collecting	LI
Onthophagus illyricus (Scopoli, 1763)	28.v.2014, 9.vii.2014	hand collecting	LI
Onthophagus ovatus (Linnaeus, 1767)	19.vii.2013, 29.vii.2013, 9.vii.2014, 2.vii.2014, 4.vi.2014, 30.iv.2014	hand collecting, pitfall trap	LI
Onthophagus verticicornis (Laicharting, 1781)	4.vii.2013, 28.v.2014	hand collecting	LI
Oryctes nasicornis (Linnaeus, 1758)	21.vi.2013	hand collecting	VU
Oxythyrea funesta (Poda, 1761)	3.v.2013	sweeping	LI
Pleurophorus caesus (Creutzer, 1796)	21.vi.2013	blacklight	LI
Protaetia aeruginosa (Linnaeus, 1767)	23.iv.2014	hand collecting	VU
Protaetia affinis (Andersch, 1797),	30.iv.2014	hand collecting	VU
Protaetia cuprea (Fabricius, 1775)	6.vi.2013, 23.iv.2014	hand collecting	LR:nt
Trichius sexualis Bedel, 1906	4.vii.2013	sweeping	EN
Valgus hemipterus (Linnaeus, 1758)	9.v.2013, 23.iv.2014, 30.iv.2014	hand collecting	LI
Volinus sticticus (Panzer, 1798)	8.vi.2015	hanging trap	LI
Scirtidae			
Cyphon coarctatus Paykull, 1799	17.v.2013, 9.v.2013, 23.iv.2014	sweeping, beating	LI
Microcara testacea (Linnaeus, 1767)	17.v.2013	sweeping	LI
Elodes minuta (Linnaeus, 1767)	11.v.2015	sweeping	LI
Silphidae			
Dendroxena quadrimaculata (Scopoli, 1772)	11.v.2015	hand collecting	LI
Nicrophorus interruptus Stephens, 1830	20.viii.2014	pitfall trap	LI
Nicrophorus vespillo (Linnaeus, 1758)	6.viii.2014	pitfall trap	LI
Nicrophorus vespilloides Herbst, 1784	6.viii.2014	pitfall trap	LI

Phosphuga atrata (Linnaeus, 1758)	9.iv.2014, 30.iv.2014	pitfall trap	LI
Silpha carinata Herbst, 1783	21.v.2014, 23.iv.2014	pitfall trap	LI
Silvanidae			
Silvanoprus fagi (Guérin-Méneville, 1844)	9.v.2013	pitfall trap	LI
Staphylinidae			
Abemus chloropterus (Panzer, 1796)	18.iv.2013, 28.v.2014, 23.iv.2014, 2.iv.2014	pitfall trap, hand collecting	LR:nt
Aleochara bipustulata (Linnaeus, 1760)	6.viii.2014	pitfall trap	LI
Aleochara sparsa Heer, 1839	18.vi.2014, 9.vii.2014, 2.vii.2014, 4.vi.2014, 18.vi.2014, 16.vii.2014	pitfall trap	LI
Anotylus sculpturatus (Gravenhorst, 1806)	9.vii.2014	pitfall trap	LI
Anthobium atrocephalum (Gyllenhal, 1827)	30.iv.2014, 9.iv.2014	pitfall trap	LI
Atheta fungi (Gravenhorst, 1806)	30.iv.2014, 11.vi.2014, 2.vii.2014, 16.vii.2014, 9.iv.2014	pitfall trap	LI
Atheta hygrotopora (Kraatz, 1856)	7.v.2014	pitfall trap	LI
Bisnius nitidulus (Gravenhorst, 1802)	9.vii.2014	pitfall trap	LI
Bolitobius castaneus (Stephens, 1832)	18.vi.2014	pitfall trap	LI
Bolitobius cingulatus Mannerheim, 1830	18.iv.2013, 6.viii.2014, 18.vi.2014	pitfall trap	LI
Bolitochara bella Märkel, 1844	16.iv.2014	pitfall trap	LI
Carpelimus bilineatus Stephens, 1834	21.vi.2013	blacklight	LI
Cypha longicornis (Paykull, 1800)	23.iv.2014	pitfall trap	LI
Deleaster dichrous (Gravenhorst, 1802)	21.vi.2013	blacklight	LI
Drusilla canaliculata (Fabricius, 1787)	4.vi.2014, 9.vii.2014, 18.vi.2014	pitfall trap	LI
Gabrius osseticus (Kolenati, 1846)	4.vi.2014, 30.iv.2014, 2.iv.2014, 9.iv.2014, 23.iv.2014, 7.v.2014	pitfall trap	LI
Gyrophaena affinis (Sahlberg, 1834)	4.vi.2014	pitfall trap	LI
Hesperus rufipennis (Gravenhorst, 1802)	2.iv.2014	pitfall trap	LI
Ischnosoma longicorne (Maklin, 1847)	21.v.2014	pitfall trap	LI
Ischnopoda umbratica (Erichson, 1837)	16.iv.2014	pitfall trap	LI
Lathrobium impressum Heer, 1841	21.vi.2013	blacklight	LI
Leptusa ruficollis (Erichson, 1839)	9.iv.2014	pitfall trap	LI
Liogluta granigera (kiesenwetter, 1850)	7.v.2014	pitfall trap	LI
Liogluta nitidula (Kraatz, 1856)	30.iv.2014	pitfall trap	LI
Lypoglossa lateralis (Mannerheim, 1830)	30.iv.2014, 23.iv.2014	pitfall trap	LI
Medon piceus (Kraatz, 1858)	16.vii.2014, 16.iv.2014, 23.iv.2014	pitfall trap	LI
Ocalea badia Erichson, 1837	30.iv.2014	pitfall trap	LI
Ocypus biharicus (Muller, 1926)	4.vii.2013, 13.vi.2013	pitfall trap	LI
Ocypus brunnipes (Fabricius, 1781)	30.vii.2014, 4.vi.2014, 16.vii.2014	pitfall trap	LI
Ocypus mus (Brullé, 1832)	16.vii.2014, 18.vi.2014	pitfall trap	LI
Ocypus nitens (Schrank, 1781)	31.v.2013, 19.v.2013	pitfall trap	LI

Omalium caesum Gravenhorst, 1806	4.vi.2014, 7.v.2014, 21.v.2014	pitfall trap	LI
Omalium rivulare (Paykull, 1789)	31.v.2013, 30.iv.2014, 21.v.2014, 7.v.2014	pitfall trap	LI
Othius punctulatus (Goeze, 1777)	21.vi.2013, 13.vi.2013, 30.iv.2014, 23.iv.2014, 7.v.2014	pitfall trap, blacklight	LI
Oxypoda acuminata (Stephens, 1832)	30.iv.2014, 23.iv.2014	pitfall trap	LI
Oxypoda vittata (Märkel, 1842)	7.v.2014	pitfall trap	LI
Paederus littoralis Gravenhorst, 1802	30.vii.2014	pitfall trap	LI
Philonthus carbonarius (Gravenhorst, 1802)	21.vi.2013	blacklight	LI
Philonthus cognatus Stephens, 1832	19.vii.2013	pitfall trap	LI
Philonthus succicola Thomson, 1860	5.v.2015, 27.iv.2015	pitfall trap	LI
Phloeostiba plana (Paykull, 1792)	9.iv.2014	pitfall trap	LI
Plataraea brunnea (Fabricius, 1798)	2.vii.2014, 30.iv.2014, 9.vii.2014	pitfall trap	LI
Platydracus chalcocephalus (Fabricius, 1801)	28.v.2014, 21.v.2014, 30.iv.2014	pitfall trap	LI
Platystethus degener Mulsant et Rey, 1878	18.iv.2013	pitfall trap	LI
Quedius cruentus (Olivier, 1795)	24.v.2013, 30.iv.2014, 27.iv.2015	pitfall trap	LI
Quedius fuliginosus (Gravenhorst, 1802)	13.vi.2013, 30.iv.2014	pitfall trap	LI
Rugilus orbiculatus (Paykull, 1789)	30.iv.2014	pitfall trap	LI
Rugilus rufipes Germar, 1836	30.iv.2014, 28.v.2014	pitfall trap	LI
Scaphidium quadrimaculatum Olivier, 1790	26.iv.2013, 7.v.2014	pitfall trap	LI
Scaphisoma agaricinum (Linnaeus, 1758)	6.viii.2014, 7.v.2014	pitfall trap	LI
Sepedophilus littoreus (Linnaeus, 1758)	30.iv.2014	pitfall trap	LI
Sepedophilus marshami (Stephens, 1832)	30.iv.2014	pitfall trap	LI
Sepedophilus testaceus (Fabricius, 1793)	2.iv.2014, 9.iv.2014, 23.iv.2014	pitfall trap	LI
Stenus cicindeloides (Schaller, 1783)	2.vii.2014	pitfall trap	LI
Stenus clavicornis (Scopoli, 1763)	18.iv.2013	pitfall trap	LI
Stenus ochropus Kiesenwetter, 1858	27.iv.2015	pitfall trap	LI
Tachinus subterraneus (Linnaeus, 1758)	23.iv.2014, 28.5.2014	pitfall trap	LI
Tachyporus hypnorum (Fabricius, 1775)	16.vii.2014	pitfall trap	LI
Tachyporus nitidulus (Fabricius, 1781)	30.iv.2014	pitfall trap	LI
Tachyporus pusillus Gravenhorst, 1806	26.iv.2013, 30.vii.2014	pitfall trap	LI
Tachyporus solutus Erichson, 1839	26.iv.2013	pitfall trap	LI
Xantholinus decorus Erichson, 1839	2.iv.2014	pitfall trap	LI
Zyras humeralis (Gravenhorst, 1802)	31.v.2013, 4.vi.2014, 23.iv.2014, 30.iv.2014, 9.iv.2014	pitfall trap	LI
Zyras lugens (Gravenhorst, 1802)	31.v.2013, 4.vi.2014, 30.iv.2014	pitfall trap	LI
Tenebrionidae			
Diaperis boleti (Linnaeus, 1758)	26.iv.2013	hand collecting	LI
Gonodera luperus (Herbst, 1783)	6.vi.2013, 17.v.2013	beating	LI
Lagria hirta (Linnaeus, 1758)	27.viii.2014	beating	LI

Scaphidema metallicum (Fabricius, 1792)	18.vi.2014, 11.v.2015	pitfall trap	LI
Stenomax aeneus (Scopoli, 1763)	17.v.2013, 24.v.2013, 16.iv.2014	beating, pitfall trap	LI
Uloma culinaris (Linnaeus, 1758)	26.iv.2013, 6.vi.2013	pitfall trap	LI
Throscidae			
Trixagus dermestoides (Linnaeus, 1766)	5.v.2015	pitfall trap	LI
Trogidae			
Trox hispidus (Pontoppidan, 1763)	2.iv.2014	pitfall trap	LI
Trox sabulosus (Linnaeus, 1758)	2.iv.2014, 30.iv.2014	pitfall trap, hand collecting	LI
Trox scaber (Linnaeus, 1767)	21.vi.2013	blacklight	LI
Trogossitidae			
Tenebroides fuscus (Goeze, 1777)	9.v.2013, 18.vi.2014	hand collecting	LI
Zopheridae			
Diodesma subterranea Latreille, 1829	21.v.2014	beating	VU
Synchita mediolanensis A. Villa et J. B. Villa, 1833	21.vi.2013	beating	VU