**Appendix A**

**Preliminary checklist of beetles (Coleoptera) of the Vittgirrensky peatland.**

1. Gyrinidae Latreille, 1810 (1 species)

1.1. *Gyrinus substriatus* Stephens, 1828 [O]: net; 13.05.2023; C, E; tyrphoneutral.

2. Haliplidae Aubé, 1836 (5 species)

2.1. *Haliplus fulvus* (Fabricius, 1801) [O]: net; 13.05, 13.06, 13.08.2023; S; tyrphoneutral.

2.2. *Haliplus immaculatus* Gerhardt, 1877 [O]: net; 07.04, 13.05, 13.06.2023; S; tyrphoneutral.

2.3. *Haliplus lineatocollis* (Marsham, 1802) [R]: net; 13.05.2023; C; tyrphoneutral.

2.4. *Haliplus ruficollis* (DeGeer, 1774) [A]: net; 13.05, 13.06, 13.07, 13.08, 17.09, 13.10.2023; C, E, S; tyrphoneutral.

2.5. *Peltodytes caesus* (Duftschmid, 1805) [O]: net; 13.05, 13.06, 13.07.2023; S; tyrphoneutral.

3. Noteridae Thomson, 1860 (1 species)

3.1. *Noterus clavicornis* (DeGeer, 1774) [F]: net; 07.04, 13.05, 13.06.2023; S; tyrphoneutral.

4. Dytiscidae Leach, 1815 (28 species)

4.1. *Acilius canaliculatus* (Nicolai, 1822) [F]: net; 07.04, 13.05, 13.06, 13.07, 13.08, 17.09.2023; C, S, W; tyrphoneutral.

4.2. *Acilius sulcatus* (Linnaeus, 1758) [O]: net; 13.05, 13.06, 13.08, 17.09, 13.10.2023; E, S; tyrphoneutral.

4.3. *Agabus bipustulatus* (Linnaeus, 1767) [R]: net; 13.05, 13.06.2023; N, S; tyrphoneutral.

4.4. *Clemnius decoratus* (Gyllenhal, 1810) [O]: net; 13.05.2023; S, W; tyrphoneutral.

4.5. *Dytiscus dimidiatus* Bergsträsser, 1778 [R]: net; 13.05, 13.06, 13.08.2023; S, W; tyrphoneutral.

4.6. *Graphoderus cinereus* (Linnaeus, 1758) [O]: net; 13.05.2023; SW; tyrphoneutral.

4.7. *Graptodytes granularis* (Linnaeus, 1767) [O]: net; 13.05, 13.06, 13.10.2023; S; tyrphoneutral.

4.8. *Graptodytes pictus* (Fabricius, 1787) [F]: net; 13.07, 17.09.2023; C, S; tyrphoneutral.

4.9. *Hydaticus seminiger* (DeGeer, 1774) [O]: net; 13.05.2023; SW; tyrphoneutral.

4.10. *Hydaticus transversalis* (Pontoppidan, 1763) [R]: net; 13.06, 13.08.2023; S; tyrphoneutral.

4.11. *Hydroporus angustatus* Sturm, 1835 [F]: net; 07.04, 13.05, 13.06, 17.09, 13.10.2023; C, S, W; tyrphoneutral.

4.12. *Hydroporus dorsalis* (Fabricius, 1787) [R]: net; 07.04, 13.07, 17.09, 13.10.2023; S, SE; tyrphoneutral.

4.13. *Hydroporus erythrocephalus* (Linnaeus, 1758) [O]: net; 13.05, 13.06.2023; S, SW; tyrphoneutral.

4.14. *Hydroporus glabriusculus* Aubé, 1838 [O]: net; 13.07.2023; S; tyrphoneutral.

4.15. *Hydroporus neglectus* Schaum, 1845 [F]: net; 07.04, 13.05, 13.10.2023; C, N, S, W; tyrphoneutral.

4.16. *Hydroporus obscurus* Sturm, 1835 [R]: net; 17.09.2023; S, SW; tyrphoneutral.

4.17. *Hydroporus palustris* (Linnaeus, 1761) [F]: net; 07.04, 13.05, 13.07, 13.08, 17.09.2023; S, W; tyrphoneutral.

4.18. *Hydroporus planus* (Fabricius, 1782) [R]: net; 13.06, 13.07, 13.08.2023; S, SE; tyrphoneutral.

4.19. *Hygrotus impressopunctatus* (Schaller, 1783) [F]: net; 07.04, 13.05.2023; S, SW; tyrphoneutral.

4.20. *Hygrotus inaequalis* (Fabricius, 1777) [F]: net; 07.04, 13.05, 13.07, 13.08, 17.09.2023; C, S, SW, W; tyrphoneutral.

4.21. *Hyphydrus ovatus* (Linnaeus, 1761) [A]: net; 13.05, 13.06, 13.07, 13.08, 17.09, 13.10.2023; C, S, W; tyrphoneutral.

4.22. *Ilybius ater* (DeGeer, 1774) [R]: net; 13.05, 13.07, 13.08.2023; S; tyrphoneutral.

4.23. *Ilybius guttiger* (Gyllenhal, 1808) [R]: net; 13.05.2023; N; tyrphoneutral.

4.24. *Laccophilus minutus* (Linnaeus, 1758) [O]: net; 07.04, 13.07, 13.08, 17.09, 13.10.2023; S; tyrphoneutral.

4.25. *Porhydrus lineatus* (Fabricius, 1775) [A]: net; 13.07, 13.08, 17.09.2023; S; tyrphoneutral.

4.26. *Rhantus exsoletus* (Forster, 1771) [R]: net; 07.04.2023; S; tyrphoneutral.

4.27. *Rhantus suturalis* (MacLeay, 1825) [R]: net; 13.05.2023; S; tyrphoneutral.

4.28. *Scarodytes halensis* (Fabricius, 1787) [R]: net; 13.08, 17.09.2023; S; tyrphoneutral.

5. Carabidae Latreille, 1802 (30 species)

5.1. *Acupalpus brunnipes* (Sturm, 1825) [A]: pitfall; 07.04-13.05, 13.05-13.06, 13.06-13.07, 13.10-17.11.2023; C, N; tyrphophilous.

5.2. *Acupalpus meridianus* (Linnaeus, 1761) [R]: pitfall; 13.05-13.06.2023; N; tyrphoneutral.

5.3. *Amara famelica* Zimmermann, 1832 [F]: pitfall; 07.04-13.05, 13.05-13.06, 13.06-13.07, 13.07-13.08, 13.08-17.09, 13.10-17.11.2023; N, SW; tyrphoneutral.

5.4. *Badister bullatus* (Schrank, 1798) [R]: pitfall; 13.05-13.06, 13.07-13.08.2023; SW; tyrphoxenous.

5.5. *Bembidion lampros* (Herbst, 1784) [F]: pitfall; 07.04-13.05.2023; N; tyrphoneutral.

5.6. *Bembidion quadrimaculatum* (Linnaeus, 1761) [O]: pitfall; 07.04-13.05, 13.08-17.09, 17.09-13.10.2023; C, N; tyrphoneutral.

5.7. *Bradycellus rufcollis* (Stephens, 1828) [R]: pitfall; 17.09-13.10.2023; C, N; tyrphophilous.

5.8. *Carabus nemoralis* Muller, 1764 [R]: pitfall; 13.07-13.08, 17.09-13.10.2023; SW; tyrphoxenous.

5.9. *Cicindela campestris* Linnaeus, 1758 [O]: pitfall, visual; 07.04-13.05, 13.05.2023; E, N, SW, W; tyrphoneutral.

5.10. *Cymindis vaporariorum* (Linnaeus, 1758) [O]: pitfall; 07.04-13.05, 13.07-13.08.2023; C; tyrphoneutral.

5.11. *Demetrias monostigma* Samouelle, 1819 [O]: net; 13.06.2023; SW, on *Phragmítes*; tyrphoneutral.

5.12. *Dyschirius globosus* (Herbst, 1784) [R]: pitfall; 13.06-13.07, 17.09-13.10.2023; C, N; tyrphoneutral.

5.13. *Harpalus tardus* (Panzer, 1796) [R]: pitfall; 13.06-13.07.2023; C; tyrphoxenous.

5.14. *Harpalus fuliginosus* (Duftschmid, 1812) [R]: pitfall; 13.07-13.08.2023; SW; tyrphoxenous.

5.15. *Leistus ferrugineus* (Linnaeus, 1758) [F]: pitfall; 13.06-13.07, 17.09-13.10.2023; C; tyrphoneutral.

5.16. *Leistus rufomarginatus* (Duftschmid, 1812) [F]: pitfall; 13.05-13.06, 17.09-13.10, 17.09-13.10.2023, C, SW; tyrphoneutral.

5.17. *Leistus terminatus* (Hellwig, 1793) [A]: pitfall; 13.05-13.06, 13.06-13.07, 13.07-13.08, 13.08-17.09, 17.09-13.10.2023; N, SW; tyrphoneutral.

5.18. *Loricera pilicornis* (Fabricius, 1775) [O]: pitfall; 13.05-13.06.2023; SW; tyrphoneutral.

5.19. *Microlestes maurus* (Sturm, 1827) [R]: pitfall; 07.04-13.05.2023; C; tyrphoneutral.

5.20. *Microlestes minutulus* (Goeze, 1777) [R]: pitfall; 17.09-13.10.2023; N; tyrphoneutral.

5.21. *Nebria brevicollis* (Fabricius, 1792) [O]: pitfall; 17.09-13.10.2023; N; tyrphoxenous.

5.22. *Notiophilus palustris* (Duftschmid, 1812) [O]: pitfall; 07.04-13.05, 13.06-13.07, 13.08-17.09.2023; C, N, SW; tyrphoneutral.

5.23. *Olisthopus rotundatus* (Paykull, 1790) [R]: pitfall; 13.07-13.08.2023; C; tyrphoneutral.

5.24. *Ophonus rufibarbis* (Fabricius, 1792) [R]: pitfall; 13.07-13.08.2023; N; tyrphoxenous.

5.25. *Philorhizus sigma* (Rossi, 1790) [R]: pitfall; 13.05-13.06.2023; N; tyrphoneutral.

5.26. *Poecilus cupreus* (Linnaeus, 1758) [F]: pitfall; 07.04-13.05, 13.05-13.06, 13.08-17.09.2023; C, N, SW; tyrphoneutral.

5.27. *Pseudoophonus rufpes* (DeGeer, 1774) [R]: pitfall; 13.05-13.06.2023; C; tyrphoxenous.

5.28. *Pterostichus anthracinus* (Illiger, 1798) [O]: pitfall; 07.04-13.05, 13.05-13.06, 17.09-13.10, 13.10-17.11.2023; C, N; tyrphoneutral.

5.29. *Pterostichus crenatus* (Duftschmid, 1812) [R]: pitfall; 13.08-17.09.2023; C; tyrphoneutral.

5.30. *Pterostichus niger* (Schaller, 1783) [A]: pitfall; 13.05-13.06, 13.07-13.08, 13.08-17.09, 17.09-13.10.2023; C, N, SW; tyrphoneutral.

6. Scirtidae Fleming, 1821 (5 species)

6.1. *Contacyphon ochraceus* (Stephens, 1830) [O]: net; 13.06, 13.07.2023; C; tyrphoneutral.

6.2. *Contacyphon padi* (Linnaeus, 1758) [F]: net; 13.06, 13.08, 13.10.2023; C, S, SW; tyrphoneutral.

6.3. *Contacyphon variabilis* (Thunberg, 1785) [F]: net, pitfall; 13.06, 13.07, 13.06-13.07.2023; C, S, SW; tyrphophilous.

6.4. *Microcara testacea* (Linnaeus, 1767) [O]: net, pitfall; 13.06, 13.06-13.07.2023; S, SW; tyrphoneutral.

6.5. *Scirtes hemisphaericus* (Linnaeus, 1758) [F]: net; 13.06, 13.07.2023; S, SW; tyrphoneutral.

7. Helophoridae Leach, 1815 (3 species)

7.1. *Helophorus aquaticus* (Linnaeus, 1758) [F]: net; 13.06.2023; S; tyrphoneutral.

7.2. *Helophorus granularis* (Linnaeus, 1761) [O]: net; 07.04, 13.05, 13.10.2023; N, E, S; tyrphoneutral.

7.3. *Helophorus ﬂavipes* Fabricius, 1792 [F]: net; 13.06, 13.07.2023; S; tyrphoneutral.

8. Hydrochidae Thomson, 1859 (1 species)

8.1. *Hydrochus elongatus* (Schaller, 1783) [R]: net; 13.08.2023; S; tyrphophilous.

9. Hydrophilidae Latreille, 1802 (9 species)

9.1. *Anacaena lutescens* (Stephens, 1829) [A]: net; 07.04, 13.05, 13.08, 17.09.2023; C, N, S; tyrphoneutral.

9.2. *Cymbiodyta marginella* (Fabricius, 1792) [R]: net; 13.10.2023; E; ; tyrphoneutral.

9.3. *Enochrus coarctatus* (Gredler, 1863) [O]: net; 13.05.2023; C, N, S, W; tyrphoneutral.

9.4. *Enochrus ochropterus* (Marsham, 1802) [O]: net; 13.06.2023; S; tyrphophilous.

9.5. *Enochrus testaceus* (Fabricius, 1801) [R]: net; 13.05.2023; S; tyrphoneutral.

9.6. *Helochares obscurus* (Müller, 1776) [O]: net; 13.05, 13.06.2023; S, W; tyrphoneutral.

9.7. *Hydrobius fuscipes* (Linnaeus, 1758) [R]: net; 13.05.2023; E; tyrphoneutral.

9.8. *Hydrochara caraboides* (Linnaeus, 1758) [R]: net; 13.05.2023; E; tyrphoxenous.

9.9. *Laccobius minutus* (Linnaeus, 1758) [R]: net; 17.09, 13.10.2023; N, S; tyrphoneutral.

10. Hydraenidae Mulsant, 1844 (2 species)

10.1. *Limnebius crinifer* Rey, 1885 [R]: net; 13.05.2023; S; tyrphoneutral.

10.2. *Ochthebius minimus* (Fabricius, 1792) [R]: net; 13.05.2023; S; tyrphoneutral.

11. Leiodidae Fleming, 1821 (4 species)

11.1. *Agathidium plagiatum* (Gyllenhal, 1810) [R]: pitfall; 13.06-13.07.2023; N; tyrphoneutral.

11.2. *Apocatops nigrita* (Erichson, 1837) [A]: pitfall; 07.04-13.05, 13.05-13.06, 13.06-13.07, 13.07-13.08.2023; N, SW; tyrphoneutral.

11.3. *Catops fuscus* (Panzer 1794) [R]: pitfall; 13.10-17.11.2023; N; tyrphoneutral.

11.4. *Sciodrepoides watsoni* (Spence, 1813) [A]: pitfall; 13.06-13.07, 13.07-13.08, 17.09-13.10.2023; N, SW; tyrphoneutral.

12. Silphidae Latreille, 1807 (5 species)

12.1. *Nicrophorus humator* (Gleditsch, 1767) [R]: pitfall; 13.06-13.07.2023; C; tyrphoxenous.

12.2. *Nicrophorus vespillo* (Linnaeus, 1758) [O]: pitfall; 13.06-13.07, 13.08-17.09.2023; C, N; tyrphoneutral.

12.3. *Nicrophorus vespilloides* Herbst, 1783 [A]: pitfall; 13.06-13.07, 13.07-13.08, 13.08-17.09.2023; C, N, SW; tyrphoneutral.

12.4. *Oiceoptoma thoracica* (Linnaeus, 1758) [O]: pitfall; 13.07-13.08, 13.08-17.09.2023; N, SW; tyrphoneutral.

12.5. *Phosphuga atrata* (Linnaeus, 1758) [R]: pitfall; 07.04-13.05.2023; N; tyrphoxenous.

13. Staphylinidae Latreille, 1802 (45 species)

13.1. *Acidota crenata* (Fabricius, 1793) [F]: pitfall; 07.04-13.05, 17.09-13.10, 13.10-17.11.2023; C, N; tyrphoneutral.

13.2. *Aleochara curtula* (Goeze, 1777) [R]: visual; 13.05.2023; E; tyrphoneutral.

13.3. *Anthobium unicolor* (Marsham, 1802) [A]: pitfall, visual; 07.04-13.05, 13.05-13.06, 13.06-13.07, 13.10, 17.09-13.10, 13.10-17.11, 17.11.2023; C, N, S, SW; tyrphoneutral.

13.4. *Bolitochara pulchra* (Gravenhorst, 1806) [O]: pitfall; 17.09-13.10.2023; C; tyrphoneutral.

13.5. *Brachygluta fossulata* (Reichenbach, 1816) [R]: pitfall; 13.05-13.06.2023; SW; tyrphoneutral.

13.6. *Brachygluta haematica* (Reichenbach, 1816) [O]: pitfall; 13.05-13.06, 13.06-13.07, 13.08-17.09.2023; N, SW; tyrphophilous.

13.7. *Carphacis striatus* (Olivier, 1795) [R]: visual; 13.07.2023; SW, on rotten Boletaceae; tyrphoneutral.

13.8. *Drusilla canaliculata* (Fabricius, 1787) [F]: pitfall; 13.05-13.06, 13.06-13.07, 13.08-17.09, 17.09-13.10.2023; C, N, SW; tyrphoneutral.

13.9. *Euconnus claviger* (Müller & Kunze, 1822) [O]: pitfall; 07.04-13.05.2023; C; tyrphoneutral.

13.10. *Euconnus wetterhallii* (Gyllenhal, 1813) [O]: pitfall; 07.04-13.05, 13.06-13.07.2023; C, SW; tyrphoneutral.

13.11. *Eusphalerum minutum* (Fabricius, 1792) [R]: visual; 13.06.2023; W; tyrphoneutral.

13.12. *Gyrophaena joyi* Wendeler, 1924 [F]: visual; 13.08.2023; SW, on Basidiomycota; tyrphoneutral.

13.13. *Habrocerus capillaricornis* (Gravenhorst, 1806) [R]: visual; 17.11.2023; S, in rotten wood; tyrphoneutral.

13.14. *Hygronoma dimidiata* (Gravenhorst, 1806) [R]: visual; 13.08.2023; SW, ditch shore; tyrphoneutral.

13.15. *Ischnosoma longicorne* (Mäklin, 1847) [F]: pitfall; 07.04-13.05, 13.05-13.06, 13.08.-17.09, 13.10-17.11.2023; C, N; tyrphophilous.

13.16. *Lesteva longoelytrata* (Goeze, 1777) [O]: visual, pitfall; 13.05, 13.05-13.06.2023; E, SW, W, near open water; tyrphoneutral.

13.17. *Lordithon thoracicus* (Fabricius, 1777) [R]: pitfall; 13.08-17.09.2023; C; tyrphoxenous.

13.18. *Mycetoporus lepidus* (Gravenhorst, 1806) [O]: pitfall; 07.04-13.05, 13.07-13.08, 13.10-17.11.2023; C, N; tyrphoneutral.

13.19. *Ocypus brunnipes* (Fabricius, 1781) [R]: pitfall; 17.09-13.10.2023; C; tyrphoxenous.

13.20. *Olophrum piceum* (Gyllenhal, 1810) [F]: pitfall; 07.04-13.05, 13.10-17.11.2023; C, N; tyrphoneutral.

13.21. *Omalium rivulare* (Paykull, 1789) [R]: visual; 17.11.2023; S; tyrphoneutral.

13.22. *Oxypoda opaca* (Gravenhorst, 1802) [F]: pitfall, visual; 13.07, 13.06-13.07, 13.08, 13.08-17.09, 13.10-17.11.2023; C, N, SW; tyrphoneutral.

13.23. *Oxyporus rufus* (Linnaeus, 1758) [O]: visual; 13.07.2023; SW, on rotten Boletaceae; tyrphoneutral.

13.24. *Parabolitobius inclinans* (Gravenhorst, 1806) [F]: pitfall; 07.04-13.05.2023; C; tyrphoneutral.

13.25. *Philonthus cognatus* Stephens, 1832 [F]: pitfall, visual; 07.04-13.05, 13.05-13.06, 13.08, 13.07-13.08.2023; C, E, N; tyrphoneutral.

13.26. *Philonthus decorus* (Gravenhorst, 1802) [R]: pitfall; 17.09-13.10.2023; SW; tyrphoneutral.

13.27. *Philonthus splendens* (Fabricius, 1793) [R]: pitfall; 13.07-13.08.2023; SW; tyrphoneutral.

13.28. *Platydracus fulvipes* (Scopoli, 1763) [O]: pitfall; 13.05-13.06, 13.06-13.07, 13.07-13.08.2023; N, SW; tyrphophilous.

13.29. *Platydracus latebricola* (Gravenhorst, 1806) [F]: pitfall; 13.05-13.06, 13.06-13.07, 13.07-13.08.2023; N, SW; tyrphophilous.

13.30. *Proteinus brachypterus* (Fabricius, 1792) [O]: pitfall; 07.04, 13.06-13.07, 17.11.2023; S, SW, W, on dung and rotten mushrooms; tyrphoneutral.

13.31. *Pselaphus heisei* Herbst, 1792 [R]: pitfall; 07.04-13.05.2023; C; tyrphophilous.

13.32. *Sepedophilus testaceus* (Fabricius, 1793) [O]: pitfall; 13.06-13.07, 13.07-13.08, 17.09-13.10.2023; C, N; tyrphoneutral.

13.33. *Stenichnus scutellaris* (Müller & Kunze, 1822) [R]: pitfall; 13.05-13.06, 13.06-13.07.2023; C, SW; tyrphoneutral.

13.34. *Stenus bimaculatus* Gyllenhal, 1810 [R]: visual; 13.05.2023; E, near open water; tyrphoneutral.

13.35. *Stenus clavicornis* (Scopoli, 1763) [R]: pitfall; 13.08-17.09.2023; N; tyrphoneutral.

13.36. *Stenus solutus* Erichson, 1840 [R]: pitfall, visual; 07.04-13.05, 13.05, 13.05-13.06, 17.09-13.10, 13.10, 13.10-17.11.2023; C, N, SW; tyrphoneutral.

13.37. *Tachinus corticinus* Gravenhorst, 1802 [R]: net, visual; 13.06, 13.08.2023; C, E; tyrphoneutral.

13.38. *Tachyporus dispar* (Paykull, 1789) [A]: pitfall; 13.10-17.11.2023; C, N; tyrphoneutral.

13.39. *Tachyporus hypnorum* (Fabricius, 1775) [F]: pitfall, visual; 07.04-13.05, 13.10, 13.10-17.11.2023; C, N; tyrphoneutral.

13.40. *Tachyporus nitidulus* (Fabricius, 1781) [R]: pitfall; 17.09-13.10.2023; C, N; tyrphoneutral.

13.41. *Xantholinus longiventris* Heer, 1839 [A]: pitfall; 07.04-13.05, 13.05-13.06, 13.06-13.07, 13.07-13.08, 13.08-17.09, 17.09-13.10, 13.10-17.11.2023; C, N, SW; tyrphoneutral.

13.42. *Zyras collaris* (Paykull, 1800) [O]: pitfall; 13.08-17.09.2023; C, N; tyrphoneutral.

13.43. *Zyras lugens* (Gravenhorst, 1802) [F]: pitfall; 07.04-13.05, 13.07-13.08.2023; C; tyrphoneutral.

14. Lucanidae Latreille, 1804 (1 species)

14.1. *Dorcus parallelepipedus* (Linnaeus, 1758) [R]: visual; 13.06.2023; N, on central road; tyrphoxenous.

15. Scarabaeidae Latreille, 1802 (6 species)

15.1. *Agrilinus rufus* (Moll, 1782) [O]: visual; 13.08.2023; E, in dung; tyrphoxenous.

15.2. *Aphodius fimetarius* (Linnaeus, 1758) [R]: visual; 13.08.2023; E, in dung; tyrphoxenous.

15.3. *Melolontha melolontha* (Linnaeus, 1758) [O]: visual; 13.05, 13.06.2023; S, on *Betula*; tyrphoneutral.

15.4. *Oxythyrea funesta* (Poda, 1761) [R]: visual; 13.07.2023; N; tyrphoxenous.

15.5. *Serica brunnea* (Linnaeus, 1758) [F]: pitfall; 13.06-13.07, 13.07-13.08.2023; N, SW; tyrphoneutral.

15.6. *Trichius fasciatus* (Linnaeus, 1758) [R]: visual; 13.07.2023; N; tyrphoxenous.

16. Buprestidae Leach, 1815 (1 species)

16.1. *Trachys minutus* (Linnaeus, 1758) [O]: visual, net; 13.06, 13.07, 13.08.2023; C, S, on *Salix*; tyrphoneutral.

17. Byrrhidae Latreille, 1804 (2 species)

17.1. *Curimopsis nigrita* (Palm, 1934) [A]: pitfall; 07.04-13.05, 13.05-13.06, 13.06-13.07.2023; C, N; tyrphophilous.

17.2. *Cytilus sericeus* (Forster, 1771) [R]: pitfall; 13.06-13.07.2023; SW; tyrphoxenous.

18. Throscidae Laporte, 1840 (2 species)

18.1. *Aulonothroscus brevicollis* (Bonvouloir, 1859) [R]: pitfall; 17.09-13.10.2023; C; tyrphoneutral.

18.2. *Trixagus dermestoides* (Linnaeus, 1767) [R]: pitfall; 13.05-13.06, 13.06-13.07, 13.07-13.08.2023; C, SW; tyrphoneutral.

19. Elateridae Leach, 1815 (11 species)

19.1. *Adrastus pallens* (Fabricius, 1792) [F]: net; 13.07.2023; S; tyrphoneutral.

19.2. *Agriotes ustulatus* (Schaller, 1783) [R]: pitfall; 13.05-13.06.2023; N, SW; tyrphoneutral.

19.3. *Agrypnus murinus* (Linnaeus, 1758) [R]: net; 13.05, 13.06.2023; C, S; tyrphoneutral.

19.4. *Ampedus balteatus* (Linnaeus, 1758) [F]: net, visual, pitfall; 13.05, 13.06, 13.06-13.07.2023; C, E, N, S, SW; tyrphoneutral.

19.5. *Ampedus pomorum* (Herbst. 1784) [O]: net, visual; 13.05, 13.05-13, 13.06-13.07.2023; C, N; tyrphoneutral.

19.6. *Ampedus sanguineus* (Linnaeus, 1758) [R]: visual; 13.06.2023; S; tyrphoneutral.

19.7. *Cidnopus aeruginosus* (Olivier, 1790) [F]: net; 13.05.2023; C, N, S, W; tyrphoneutral.

19.8. *Dalopius marginatus* (Linnaeus, 1758) [R]: net; 13.05-13.06, 13.06-13.07.2023; N, SW; tyrphoneutral.

19.9. *Hemicrepidius niger* (Linnaeus, 1758) [O]: net; 13.06.2023; S; tyrphoxenous.

19.10. *Melanotus villosus* (Geoffroy, 1785) [R]: net; 13.05.2023; E; tyrphoneutral.

19.11. *Sericus brunneus* (Linnaeus, 1758) [O]: net; 13.05.2023; C, N; tyrphoneutral.

20. Cantharidae Imhoff, 1856 (1815) (13 species)

20.1. *Cantharis flavilabris* Fallén, 1807 [F]: net; 13.06, 13.07.2023; S, SW; tyrphoneutral.

20.2. *Cantharis livida* Linnaeus, 1758 [O]: net; 13.06.2023; C, along central road; tyrphoxenous.

20.3. *Cantharis nigricans* (Müller, 1776) [O]: net; 13.06.2023; C; tyrphoneutral.

20.4. *Cantharis pallida* Goeze, 1777 [O]: net; 13.06.2023; W; tyrphoneutral.

20.5. *Cantharis pellucida* Fabricius, 1792 [O]: net; 13.06.2023; C; tyrphoneutral.

20.6. *Cantharis rufa* Linnaeus, 1758 [O]: net; 13.06.2023; SW; tyrphoxenous.

20.7. *Malthodes marginatus* (Latreille, 1806) [R]: net; 13.06, 13.07.2023; S, SW; tyrphoneutral.

20.8. *Malthodes minimus* (Linnaeus, 1758) [R]: net; 13.06.2023; SW; tyrphoneutral.

20.9. *Malthodes pumilus* (Brébisson, 1835) [O]: net; 13.06.2023; SW, on *Calluna*; tyrphophilous.

20.10. *Rhagonycha fulva* (Scopoli, 1763) [A]: net; 13.07.2023; C, N, S; tyrphoxenous.

20.11. *Rhagonycha lignosa* (Müller, 1764) [O]: net; 13.06.2023; SW; tyrphoneutral.

20.12. *Rhagonycha nigriventris* Motschulsky, 1860 [R]: net; 13.05.2023; C; tyrphoneutral.

20.13. *Rhagonycha testacea* (Linnaeus, 1758) [O]: net; 13.06.2023; SW; tyrphoxenous.

21. Dermestidae Latreille, 1804 (1 species)

21.1. *Dermestes murinus* Linnaeus, 1758 [F]: pitfall; 13.06-13.07, 13.08-17.09.2023; C, N; tyrphoneutral.

22. Latridiidae Erichson, 1842 (1 species)

22.1. *Melanophthalma transversalis* (Gyllenhal, 1827) [O]: net; 13.06, 13.08.2023; C, along central road; tyrphoxenous.

23. Endomychidae Leach, 1815 (1 species)

23.1. *Endomychus coccineus* (Linnaeus, 1758) [O]: visual, net; 07.04, 13.06.2023; S, E, larvae on a birch stump with *Stereum hirsutum*; tyrphoneutral.

24. Coccinellidae Latreille, 1807 (10 species)

24.1. *Chilocorus renipustulatus* (Scriba, 1791) [O]: net; 13.07.2023; S, SW; tyrphoneutral.

24.2. *Coccinella hieroglyphica* Linnaeus, 1758 [O]: pitfall; 13.06-13.07.2023; N; tyrphoneutral.

24.3. *Coccinella septempunctata* Linnaeus, 1758 [F]: net, pitfall; 13.06, 13.07, 17.09-13.10.2023; C, N; tyrphoneutral.

24.4. *Halyzia sedecimguttata* (Linnaeus, 1758) [R]: net; 13.07.2023; SW; tyrphoneutral.

24.5. *Harmonia axyridis* (Pallas, 1773) [F]: net, visual; 13.06 [larva], 13.07, 13.08.2023; C, along road; tyrphoxenous.

24.6. *Propylea quatuordecimpunctata* (Linnaeus, 1758) [F]: net; 13.05, 13.06, 13.07, 13.08.2023; C, E, N, SW, W; tyrphoneutral.

24.7. *Psyllobora vigintiduopunctata* (Linnaeus, 1758) [F]: net; 13.05, 13.07, 17.09.2023; C, S, SW; tyrphoneutral.

24.8. *Scymnus suturalis* Thunberg, 1795 [O]: net, pitfall; 13.05-13.06, 13.06, 13.06-13.07, 13.07, 13.08, 13.08-17.09, 17.09-13.10.2023; C, N, SW; tyrphophilous.

24.9. *Stethorus punctillum* (Weise, 1891) [R]: net; 13.08.2023; C; tyrphoxenous.

24.10. *Tytthaspis sedecimpunctata* (Linnaeus, 1761) [O]: net; 13.07, 13.08.2023; C; tyrphoneutral.

25. Mordellidae Latreille, 1802 (3 species)

25.1. *Mordella aculeata* Linnaeus, 1758 [F]: net, pitfall; 13.06-13.07, 13.08, 13.08-17.09.2023; C, N; tyrphoneutral.

25.2. *Mordellistena koelleri* Ermisch, 1956 [R]: net; 13.06.2023; C; tyrphoneutral.

25.3. *Variimorda villosa* (Schrank, 1781) [F]: net; 13.07.2023; C, along central road on Apiaceae; tyrphoneutral.

26. Tenebrionidae Latreille, 1802 (2 species)

26.1. *Isomira murina* (Linnaeus, 1758) [R]: net; 13.06.2023; C; tyrphoneutral.

26.2. *Lagria hirta* (Linnaeus, 1758) [A]: net; 13.07.2023; C, N, S; tyrphoneutral.

27. Oedemeridae Latreille, 1810 (4 species)

27.1. *Anogcodes melanurus* (Fabricius, 1787) [R]: net; 13.07.2023; N; tyrphoxenous.

27.2. *Oedemera croceicollis* (Gyllenhal, 1827) [O]: net; 13.06.2023; SW; tyrphoneutral.

27.3. *Oedemera lurida* (Marsham, 1802) [F]: net; 13.07.2023; C, N, S; tyrphoneutral.

27.4. *Oedemera virescens* (Linnaeus, 1767) [R]: net; 13.05.2023; S; tyrphoxenous.

28. Pyrochroidae Latreille, 1806 (1 species)

28.1. *Schizotus pectinicornis* (Linnaeus, 1758) [O]: visual; 13.05 (adult), 17.11.2023 (larva); S, larvae under bark of birch stump; tyrphoneutral.

29. Scraptiidae Mulsant, 1856/Gistel, 1856 (1 species)

29.1. *Anaspis frontalis* (Linnaeus, 1758) [O]: net; 13.06.2023; C, S; tyrphoneutral.

30. Byturidae Jacquelin du Val, 1858 (1 species)

30.1. *Byturus ochraceus* (Scriba, 1790) [O]: net; 13.05.2023; E; tyrphoxenous.

31. Melyridae Leach, 1815 (3 species)

31.1. *Cordylepherus viridis* (Fabricius, 1787) [O]: net; 13.06, 13.07.2023; C, S; tyrphoneutral.

31.2. *Dasytes niger* (Linnaeus, 1761) [R]: pitfall; 13.07-13.08.2023; N; tyrphoneutral.

31.3. *Dasytes plumbeus* (Müller, 1776) [F]: pitfall, net; 13.06-13.07, 13.07; C, N, SW; tyrphoneutral.

32. Cryptophagidae Kirby, 1837 (2 species)

32.1. *Cryptophagus lycoperdi* (Scopoli, 1763) [A]: visual, pitfall; 13.08, 13.08-17.09.2023; N, SW, W, associated with *Scleroderma citrinum*; tyrphoneutral.

32.2. *Telmatophilus typhae* (Fallén, 1802) [F]: net; 13.07.2023; C, S, associated with *Typha latifolia*; tyrphoneutral.

33. Phalacridae Leach, 1815 (1 species)

33.1. *Phalacrus championi* Guillebeau, 1892 [R]: net; 13.06, 13.07.2023; C, W; tyrphoneutral.

34. Kateretidae Kirby, 1837 (1 species)

34.1. *Brachypterus urticae* (Fabricius, 1792) [A]: net; 13.06, 13.07.2023; C, on *Urtica dioica*; tyrphoxenous.

35. Nitidulidae Latreille, 1802 (4 species)

35.1. *Brassicogethes aeneus* (Fabricius, 1775) [O]: net; 13.06.2023; S, along central road; tyrphoneutral.

35.2. *Brassicogethes viridescens* (Fabricius, 1787) [O]: net; 13.07.2023; C, along central road; tyrphoneutral.

35.3. *Meligethes ﬂavimanus* Stephens, 1830 [R]: pitfall; 13.06-13.07.2023; N; tyrphoxenous.

35.4. *Pocadius ferrugineus* (Fabricius, 1775) [O]: pitfall, visual; 13.06-13.07, 13.07.2023; SW; tyrphoneutral.

36. Cerambycidae Latreille, 1802 (8 species)

36.1. *Agapanthia villosoviridescens* (DeGeer, 1775) [O]: net; 13.06, 13.07.2023; S; tyrphoxenous.

36.2. *Lamia textor* (Linnaeus, 1758) [R]: visual; 13.07.2023; N; tyrphoneutral.

36.3. *Leptura quadrifasciata* Linnaeus, 1758 [O]: visual, net; 13.07.2023; C, S, along central road on Apiaceae; tyrphoneutral.

36.4. *Stenurella melanura* (Linnaeus, 1758) [O]: visual; 13.07.2023; N, along central road on Apiaceae; tyrphoneutral.

36.5. *Stenurella nigra* (Linnaeus, 1758) [O]: visual; 13.06.2023; S, along central road on Apiaceae; tyrphoneutral.

36.6. *Stictoleptura maculicornis* (De Geer, 1775) [R]: net; 13.07.2023; C, along central road on Apiaceae; tyrphoneutral.

36.7. *Stictoleptura rubra* (Linnaeus, 1758) [O]: visual; 13.07, 13.08.2023; N, S; tyrphoneutral.

36.8. *Strangalia attenuata* (Linnaeus, 1758) [R]: net; 13.07.2023; C, along central road on Apiaceae; tyrphoneutral.

37. Megalopodidae Latreille, 1802 (1 species)

37.1. *Zeugophora subspinosa* (Fabricius, 1781) [R]: net; 13.06.2023; E, on *Populus tremulae*; tyrphoneutral.

38. Chrysomelidae Latreille, 1802 (24 species)

38.1. *Agelastica alni* (Linnaeus, 1758) [O]: net, pitafall; 13.05, 13.05-13.06.2023; N; tyrphoneutral.

38.2. *Altica aenescens* Weise, 1888 [A]: visual, net; 13.05, 13.06, 13.07, 13.08.2023; C, E, N, W, on leaves of *Betula pubescens*; tyrphoneutral.

38.3. *Altica chamaenerii* (Lindberg, 1926) [O]: net, pitfall; 13.05, 13.08-17.09.2023; C, N, on leaves of *Chamaenerion angustifolium*; tyrphoneutral.

38.4. *Altica longicollis* (Allard, 1860) [A]: pitfall; 07.04-13.05, 13.05-13.06, 13.06-13.07, 13.07-13.08.2023; C, N, in *Calluna*-communities; tyrphophilous.

38.5. *Batophila rubi* (Paykull, 1799) [F]: net; 13.05, 13.06, 13.06-13.07, 13.07.2023; C, N, along road on *Rubus idaeus*; tyrphoxenous.

38.6. *Bromius obscurus* (Linnaeus, 1758) [F]: visual, net; 13.05.2023; C, N, along central road on *Chamaenerion angustifolium*; tyrphoneutral.

38.7. *Cassida denticollis* Suffrian, 1844 [O]: net; 13.07.2023; S, along central road on *Achillea millefolium*; tyrphoxenous.

38.8. *Cassida rubiginosa* Müller, 1776 [F]: net; 13.05, 13.08, 17.09.2023; C, N, S, on *Cirsium arvense*; tyrphoxenous.

38.9. *Cassida viridis* Linnaeus, 1758 [R]: pitfall; 13.05-13.06.2023; N; tyrphoneutral.

38.10. *Chrysomela populi* Linnaeus, 1758 [R]: net; 13.05.2023; S, on regrowth of *Populus tremulae*; tyrphoneutral.

38.11. *Crepidodera aurata* (Marsham, 1802) [F]: net; 13.05, 13.07.2023; C, S, on leaves of *Salix* sp.; tyrphoneutral.

38.12. *Cryptocephalus decemmaculatus* (Linnaeus, 1758) [O]: net; 13.06.2023; C, on leaves of *Salix* sp.; tyrphoneutral

38.13. *Cryptocephalus ocellatus* Drapiez, 1819 [O]: net; 13.06, 13.07.2023; C, on leaves of *Salix* sp.; tyrphoneutral

38.14. *Cryptocephalus pusillus* Fabricius, 1777 [R]: pitfall, net; 13.06-13.07, 13.07.2023; C, N.; tyrphoneutral

38.15. *Galeruca tanaceti* (Linnaeus, 1758) [R]: net; 13.08.2023; N, central road; tyrphoxenous.

38.16. *Lochmaea caprea* (Linnaeus, 1758) [A]: visual, net, pitfall; 13.05, 13.05-13.06, 13.06, 13.06-13.07, 13.08, 13.08-17.09.2023; C, N, S, SW, on *Salix* and *Betula*; tyrphoneutral.

38.17. *Longitarsus jacobaeae* (Waterhouse, 1858) [R]: net; 13.08.2023; C, along central road; tyrphoxenous.

38.18. *Neocrepidodera transversa* (Marsham, 1802) [A]: net; 13.06, 13.07, 13.08.2023; C, N, S, on *Cirsium arvense*; tyrphoxenous.

38.19. *Oulema obscura* (Stephens, 1831) [R]: net; 13.05, 13.07.2023; C, N, central road; tyrphoneutral.

38.20. *Oulema melanopus* (Linnaeus, 1758) [R]: net; 13.07.2023; N; tyrphoxenous.

38.21. *Pachybrachis hieroglyphicus* (Laicharting, 1781) [R]: net; 13.06.2023; C, on leaves of *Salix* sp.; tyrphoneutral.

38.22. *Phyllotreta atra* (Fabricius, 1775) [R]: net; 13.07, 17.09.2023; C, SW; tyrphoneutral.

38.23. *Phyllotreta striolata* (Illiger, 1803) [R]: net; 13.07, 13.08.2023; C, SW; tyrphoneutral.

38.24. *Psylliodes chalcomerus* (Illiger, 1807) [F]: net, visual; 13.05, 13.07.2023; C, N, along road on *Carduus*; tyrphoxenous.

39. Attelabidae Billberg, 1820 (3 species)

39.1. *Byctiscus betulae* (Linnaeus, 1758) [R]: net; 13.05.2023; C, on *Salix* sp. ; tyrphoneutral.

39.2. *Byctiscus populi* (Linnaeus, 1758) [O]: net; 13.06.2023; E, on regrowth of *Populus trmulae*; tyrphoneutral.

39.3. *Temnocerus coeruleus* (Fabricius, 1798) [O]: net; 13.06.2023; C, along road on *Salix* sp.; tyrphoneutral.

40. Brentidae Billberg, 1820 (6 species)

40.1. *Betulapion simile* (Kirby, 1811) [R]: net; 13.06.2023; S, on *Betula* sp.; tyrphoneutral.

40.2. *Ceratapion onopordi* (Kirby, 1808) [R]: net; 13.05, 13.10.2023; C, along road on *Carduus crispus*; tyrphoxenous.

40.3. *Eutrichapion ervi* (Kirby, 1808) [R]: net; 13.06.2023; C, along central road on *Lathyrus pratensis*; tyrphoxenous.

40.4. *Nanophyes marmoratus* (Goeze, 1777) [O]: net; 13.07.2023; C, on *Lythrum salicaria* near open water; tyrphoneutral.

40.5. *Oxystoma cerdo* (Gerstaecker, 1854) [R]: net; 13.05, 13.07.2023; C, along road on *Vicia cracca*; tyrphoxenous.

40.6. *Protapion fulvipes* (Geoffroy, 1785) [O]: net; 13.06.2023; C, along road on *Trifolium repens*; tyrphoxenous.

41. Curculionidae Latreille, 1802 (30 species)

41.1. *Anthonomus rubi* (Herbst, 1795) [O]: net; 13.06, 13.08.2023; C, along road on *Rubus idaeus*; tyrphoxenous.

41.2. *Archarius salicivorus* (Paykull, 1792) [R]: net; 13.06.2023; C, along central road on *Salix* sp.; tyrphoneutral.

41.3. *Barypeithes pellucidus* (Boheman, 1834) [A]: pitfall; 13.06-13.07.2023; SW; tyrphoxenous.

41.4. *Brachysomus echinatus* (Bonsdorff, 1785) [A]: net; 13.05-13.06, 13.06-13.07.2023; SW; tyrphoneutral.

41.5. *Calosirus terminatus* (Herbst, 1795) [O]: net; 13.07, 13.10.2023; C, N, along road; tyrphoxenous.

41.6. *Ceutorhynchus obstrictus* (Marsham, 1802) [O]: net; 13.07.2023; N, along road; tyrphoxenous.

41.7. *Cleonis pigra* (Scopoli, 1763) [O]: visual, pitfall; 13.05, 13.05-13.06.2023; N; tyrphoxenous.

41.8. *Cryptorhynchus lapathi* (Linnaeus, 1758) [R]: net; 13.06.2023; C; tyrphoneutral.

41.9. *Hypera arator* (Linnaeus, 1758) [R]: pitfall; 07.04-13.05.2023; N; tyrphoxenous.

41.10. *Hypera nigrirostris* (Fabricius, 1775) [R]: pitfall; 13.06-13.07.2023; SW; tyrphoxenous.

41.11. *Hypera postica* (Gyllenhal, 1813) [R]: net; 13.08.2023; S; tyrphoxenous.

41.12. *Larinus turbinatus* Gyllenhal, 1835 [R]: net; 13.06.2023; N, along road on *Carduus*; tyrphoxenous.

41.13. *Micrelus ericae* (Gyllenhal, 1813) [R]: pitfall; 13.06-13.07.2023; N, in *Calluna* community; tyrphophilous.

41.14. *Nedyus quadrimaculatus* (Linnaeus, 1758) [O]: net; 13.05.2023; S, on *Urtica dioica*; tyrphoxenous.

41.15. *Orchestes jota* (Fabricius, 1787) [F]: net; 13.05, 13.06, 13.08.2023; C, N, S, W, on *Betula*; tyrphoneutral.

41.16. *Otiorhynchus ovatus* (Linnaeus, 1758) [O]: pitfall; 13.07-13.08, 17.09-13.10.2023; C, N; tyrphoxenous.

41.17. *Otiorhynchus tristis* (Scopoli, 1763) [R]: net; 13.07.2023; N; tyrphoxenous.

41.18. *Phyllobius argentatus* (Linnaeus, 1758) [R]: net; 13.06.2023; C; tyrphoneutral.

41.19. *Phyllobius pomaceus* Gyllenhal, 1834 [F]: net; 13.06.2023; C, S, along road on *Urtica dioica*; tyrphoxenous.

41.20. *Phyllobius pyri* (Linnaeus, 1758) [R]: net; 13.05.2023; S; tyrphoneutral.

41.21. *Polydrusus cervinus* (Linnaeus, 1758) [F]: net, pitfall; 13.05, 13.05-13.06, 13.06, 13.06-13.07, 13.07.2023; C, E, N, S, SW, on *Betula*; tyrphoneutral.

41.22. *Polydrusus picus* (Fabricius, 1792) [A]: net, visual; 13.06, 13.07.2023; C, S, SW, on *Salix* sp.; tyrphoneutral.

41.23. *Rhamphus pulicarius* (Herbst, 1795) [O]: net, visual; 13.05, 13.06.2023; C, SW, on *Salix* sp.; tyrphoneutral.

41.24. *Rhinocyllus conicus* (Frölich, 1792) [F]: net; 13.05, 13.06, 13.07.2023; C, N, along road on *Carduus*; tyrphoxenous.

41.25. *Rhinusa linariae* (Panzer, 1793) [R]: net; 13.07.2023; C, along road on *Linaria vulgaris*; tyrphoxenous.

41.26. *Rutidosoma graminosum* (Gistel, 1857) [R]: net; 13.06.2023; SW; tyrphoneutral.

41.27. *Sciaphilus asperatus* (Bonsdorff, 1785) [F]: pitfall; 13.06-13.07, 13.07-13.08.2023; SW; tyrphoneutral.

41.28. *Sitona hispidulus* (Fabricius, 1777) [O]: net; 13.08.2023; S; tyrphoneutral.

41.29. *Sitona lineatus* (Linnaeus, 1758) [R]: pitfall; 07.04-13.05.2023; N; tyrphoxenous.

41.30. *Tanymecus palliatus* (Fabricius, 1787) [F]: net; 13.06.2023; C, along central road; tyrphoxenous.