



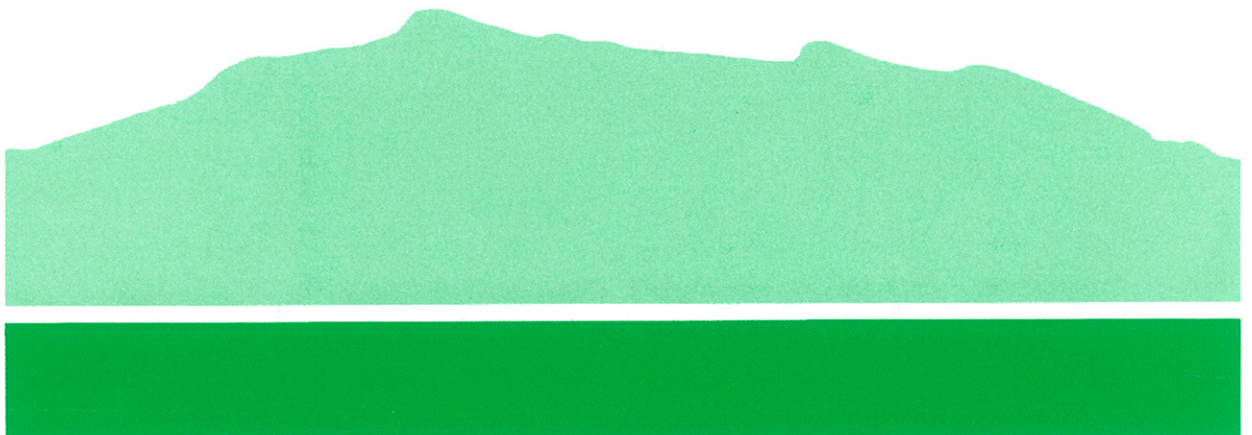
A Checklist of Diptera, Hymenoptera and Coleoptera from Mount Mansfield, Vermont

1991-1994

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**A CHECKLIST OF DIPTERA,
HYMENOPTERA AND COLEOPTERA
FROM MOUNT MANSFIELD, VERMONT**

1991 - 1994

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INTRODUCTION

To better understand the health of the forests on Mt. Mansfield, the University of Vermont (UVM) and the Vt. Department of Forests, Parks, and Recreation developed the Vermont Forest Ecosystem Monitoring Program (VforEM), formerly the Vermont Monitoring Cooperative (VMC). The principle focus of VforEM is to measure conditions and changes in the environment, flora and fauna of forest ecosystems on Mt. Mansfield (Wilmot & Scherbatskoy 1992). Mt. Mansfield is a regionally significant habitat supporting a unique assemblage of alpine, sub-alpine, and hardwood plants and animals. Its forests have a Boreal Zone and an Eastern Deciduous Zone (Siccama 1974). It is Vermont's highest mountain and supports multiple land-use for timber production, recreation, and agriculture (Wilmot & Scherbatskoy 1992). In 1997, the ridgeline attracted > 40,000 visitors who either hiked up mountain trails or drove the toll road to view the scenery and experience of an alpine habitat (Botzojorns 1999).

METHODS

Study areas. Insects were surveyed on the west slope of Mt. Mansfield between 414-1170 m elevation (Fig 1). The tree species diversity in the low elevation Eastern Deciduous Zone is high with 75-100% in healthy condition (Wilmot 1995). These forests are dominated by sugar maple (*Acer saccharum* Marshall), beech (*Fagus grandifolia* Ehrhart), and yellow birch (*Betula alleghaniensis* Britton). The higher elevation Boreal Zone has fewer species and is dominated by balsam fir (*Abies balsamea* (L.)) and red spruce (*Picea rubens* Sargent).

Sub-alpine spruce-fir forest (SF, Site 1) was located near the summit at an elevation of 1170 m. This study site was accessed by driving the Mt. Mansfield Toll Road (off the Mountain Road in Stowe, VT) to the summit then hiking south on the Long Trail. Balsam fir dominated the plots, followed by mountain paper birch (*Betula*

papyrifera cordifolia (Regel) Fernald) and red spruce. Vegetation included spinulose wood-fern (*Dryopteris spinulosa* (O.F. Mueller) Watt), common wood sored (*Oxalis montana* Rafinesque-Schmait), and shining clubmoss (*Lycopodium lucidulum* Michaux). The well drained soil types from this habitat were RkE - Ricker peat, very rocky, 15 to 80% slopes and StC - Stratton-Londonderry complex, 8 to 25% slopes (Babcock 1981). Monthly mean precipitation was 169 mm during May – October, 1991-1994 and the mean temperature was 9.0° C (P. Girton, Dept. Forests, Parks, & Rec., Essex Jct., VT pers. comm.).

Mixed northern hardwood forest (MH, Site 2) was located at an elevation of 610 m in Underhill State Park, Pleasant Valley Rd, Underhill, Vermont. Maples were abundant especially sugar maple and striped maple (*Acer pensylvanicum* L.). Yellow birch was equally common in this area (Howland 1995). In addition to shining clubmoss and spinulose wood-fern, hobblebush (*Viburnum alifolium* Marshall) and skunk currant (*Ribes glandulosum* Grauer) were also present. The soil series for this site was LoE – Londonderry-Stratton complex, 25 to 60% slope and well drained (Babcock 1981). The estimated seasonal (May – October) mean precipitation was 110 mm and temperature, 12° C. These weather variables were calculated by using a model for forecasting physical and chemical climate (Ollinger et. al 1995).

Sugar maple forest (SM, Site 3) plots were located at the UVM Proctor Maple Research Center (PMRC) in Underhill, VT. The elevation of this site was 414 m. Sugar maple was the dominant tree species with a herbaceous cover consisting of spinulose wood-fern, spotted touch-me-not (*Impatiens capensis* Meerburgh), and goldenrod (*Solidago rugosa* Aiton). The soil series for this study site was LyE – Lyman-Marlow, very rocky loams, 30 – 60% slopes (Allen 1989). The overall monthly mean precipitation for May – October was 104 mm, and the average temperature was

14.0° C (from PMRC weather station). Monthly temperatures were recorded from 1991 – 1994, except July 1994 (P. Girton, Dept. Forests, Parks, & Rec., Essex Jct., VT pers. comm.).

Sampling design. Within each study site, we randomly delineated 4 – 20 m diam. plots modeled after the North American Maple Project (NAMP) plots in PMRC (Wilmot & Scherbatskoy 1992). The plots were 60 m apart, and within each, we placed 6 pitfall traps at 60° intervals 10 m from plot center (Fig. 2A & B). Pitfall traps were made of 59-ml plastic cups, containing 25 ml of 0.05% formalin. These cups were nested at the bottom of a 355-ml plastic cup (10 cm deep, 8 cm diam. at mouth) which were left in the ground to minimize soil disturbance (Fig. 2C). To keep out the rain, a plastic disk (18 cm diam.) was placed ≈ 5 cm above each trap. Disks were held by two small wire poles that were inserted in the ground.

Collection dates varied among habitats over the four years of sampling. Weather and accessibility determined when collection could start and stop. From the SF study site, beetles were collected from 06 June – 04 October 1991, 02 June – 06 October 1992, 02 June – 29 September 1993 and 30 May – 03 October 1994. The collection dates for MH and SM were 06 June – 01 November 1991, 14 May – 20 October 1992, 19 May – 20 October 1993 and 09 May – 31 October 1994. The traps were emptied twice a week in 1991 and 92 and once a week in 1993 and 94. Beetles were stored in 75% EtOH, and subsequently pinned, sorted, identified, and counted. Voucher specimens are located at the Entomology Research Laboratory Insect Collection, UVM, Burlington, VT.

A single canopy malaise trap was installed in each of the selected trees to capture Hymenoptera (Fig. 3). The traps were installed 10-15 m above ground in the sugar maples and 2-3 m in balsam firs. Canopy malaise trap designed by Nyrop &

Simmons (1986) were used to collect Hymenoptera. The trap was one m³ made of PVC pipe and saran 20-mesh screening. A collection jar was attached to a retrieving line that passed through a threaded pipe positioned in front of the trap. Insects were collected by lowering the collecting jar. Trap contents were collected twice a week from 1991 - 1992. Collection dates for SF were 27 May - 20 September 1991 and 02 June - 06 October 1992. MH 27 May - 01 November 1991 and 14 May - 20 October, SM 06 June - 01 November 1991 and 14 May - 20 October 1992.

Use of List. The following list is a provisional record of the Diptera, Hymenoptera and Coleoptera of Mt. Mansfield, Vermont. This is neither a complete list nor a state list. It is not the result of a review of the literature nor of other collections. Information on each species is presented in the following sequence: Genus, Species, author, publication date, determined by (number code), year of determination, common name(s), site location(s) and collection date(s). Many of the Diptera and Hymenoptera in this collection have not been identified to species only to genus by specialists. Syrphidae (Diptera) and Ichneumonidae (Hymenoptera) are fairly complete groups. We included host plants for the sawflies (Symphyta). Diptera were listed according to *American Insects* (Arnett 1993) and the Hymenoptera were listed according to *The Catalog of Hymenoptera in America North of Mexico* (Krombein et. al 1979). Carabidae (Coleoptera) were listed according to the *Catalogue of the Geadephaga of America North of Mexico* (Bousquet & LaRochelle 1993). All other Coleoptera were listed according to the *Checklist of Beetles of Canada and Alaska* (Bousquet 1991).

ACKNOWLEDGMENTS

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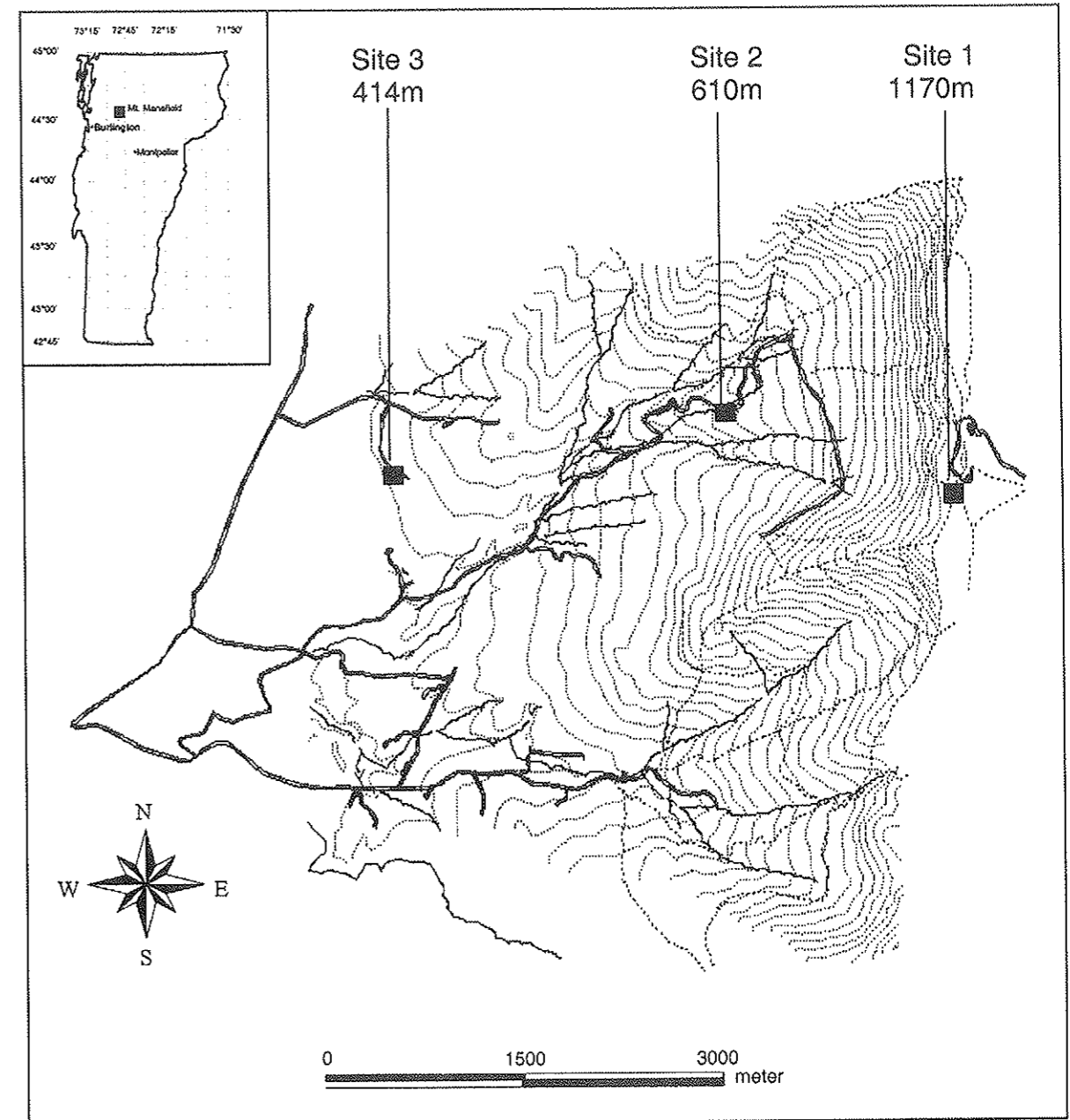


Fig. 1. Sampling sites for the insect biodiversity survey on the west slope of Mt. Mansfield.

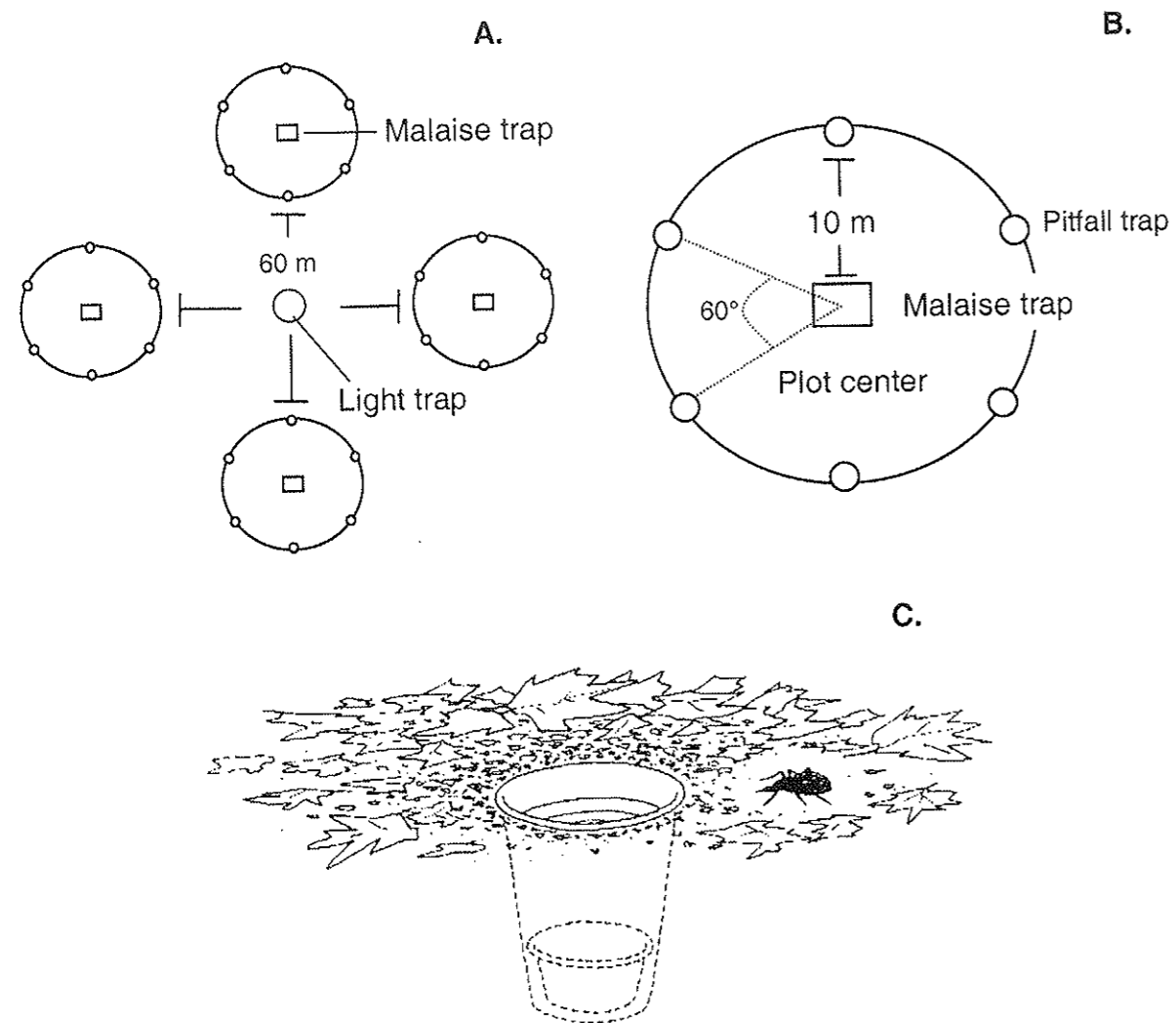


Fig. 2. Experimental plot design (A.), details of each plot layout (B.) and pitfall trap design used for capturing Carabidae (C.).

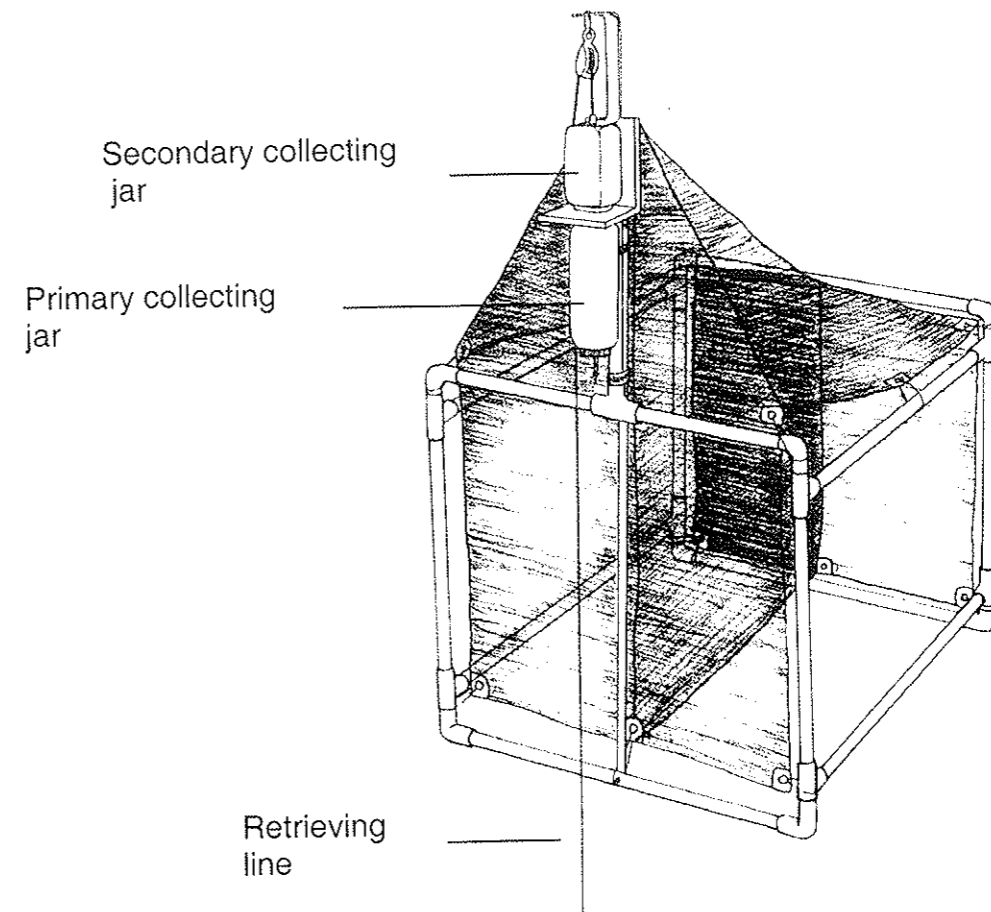
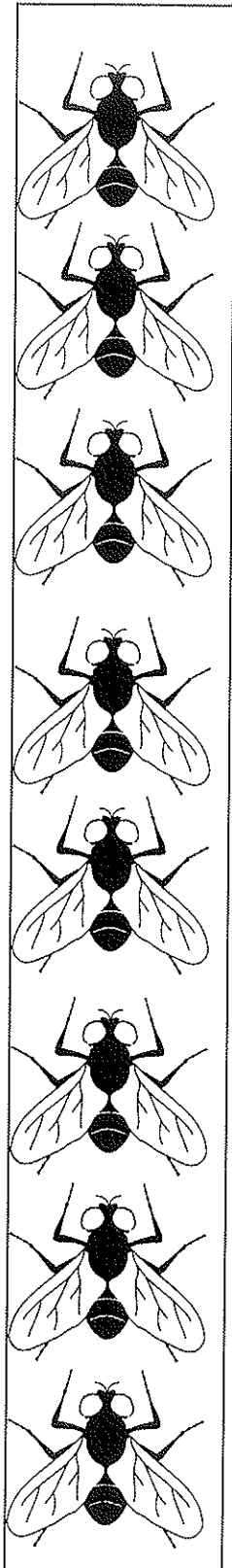


Fig. 3. Canopy malaise trap used to collect Hymenoptera and Diptera on Mt. Mansfield 1991-1992.

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ORDER DIPTERA
Flies



Family TIPULIDAE (crane flies)

Subfamily TIPULINAE
Tribe TIPULINI

Genus **NEPHROTOMA** Meigen
N. ferruginea (Fabricius). Det. 2¹; Site 1, 2, 3²; June 23-August 11

Subfamily CYLINDROTOMINAE
Tribe ERIOPTERINI

Genus **PEDICIA** Latreille
P. sp. Det. 18; 1995; Site 3; August 20

Subfamily LIMONIINAE
Tribe LIMONIINI

Genus **LIMONIA** Meigen
L. cinctipes Det. 1; Site 2, 3; June 23-September 15

Family BIBIONIDAE (march flies)

Subfamily HESPERININAE

Genus **DILOPHUS** Meigen
D. sp. Det. 18; 1995; Site 3; June 9

Genus **PENTHETRIA** Meigen
P. heteroptera (Say). Det. 18; 1995; Site 1; October 3
P. sp. 2 (Say). Det. 18; 1995; Site 2; August 4

Subfamily BIBIONINAE

Genus **BIBIO** Geoffroy
B. xanthopus Wiedemann. Det. 1; Site 1, 3; May 26-September 15¹
B. sp. Det. 18; 1995; Site 1, 2, 3; July 4-October 20
B. sp. 2 Det. 2; Site 1, 2, 3; May 21-September 17
B. sp. 3 Det. 2; Site 1; September 15

Family MYCETOPHILIDAE (fungus gnat flies)

Subfamily MYCETOPHILINAE

Genus **MYCETOPHILA** Meigen
M. sp. Det. 18; 1995; Site 1; August 25
M. sp. 2 Det. 18; 1995; Site 3; August 4

Subfamily SCIOPHILINAE

Genus **HADRONEURA** Lundström
H. sp. Det. 18; 1995; Site 1; June 27

Genus **LEIA** Meigen
L. sp. Det. 18; 1995; Site 3; August 13-September 17
L. sp. 2 Det. 18; 1995; Site 3; August 20
L. sp. 3 Det. 18; 1995; Site 3; July 25

Genus **MACROCERA** Meigen
M. sp. Det. 18; Site 3; July 28

Family ANISOPODIDAE (wood gnats)

Subfamily ANISOPODINAE

Genus **SYLVICOLA** Harris
S. alternatus (Say). Det. 1; Site 1, 2, 3; May 14-June 27

Genus **ANISOPUS** Meigen
A. sp. Det. 18; 1995; Site 3; June 2
A. sp. 2 Det. 18; 1995; Site 2; May 21
A. sp. 3 Det. 18; 1995; Site 2; May 12

Family TABANIDAE (horse and deer flies)

Subfamily PANGONIINAE
Tribe PANGONIINI

Genus **STONEMYIA** Brennan
S. tranquilla (Osten Sacken, 1875). Det. 3; Site 1, 2, 3; July 17-September 15

Subfamily CHRYSOPSINAE
Tribe CHRYSOPSINI

Genus **CHRYSOPS** Meigen
C. sordidus Osten Sacken, 1875. Det. 3; 1992; Site 3; June 6

Subfamily TABANINAE
Tribe TABANINI

Genus **HYBOMITRA** Enderlein
H. microcephala Osten Sacken, 1878. Det. 1; Site 1, 2, 3; July 23-August 11

Family RHAGIONIDAE (snipe flies)

Genus **RHAGIO** Fabricius
R. mystaceus (Macquart). Det. 2; Site 1, 2, 3; June 6-July 16
R. gracillius Det. 2; Site 1, 2, 3; July 4-August 20

Genus **SYMPHOROMYIA** Frauenfeld
S. sp. Det. 1; Site 2, 3; May 21-July 9

Genus **PTIOLINA** Zetterstedt
P. sp. Det. 1; Site 2, 3; July 2-11

¹ Determiners names on pages 14-15
² Site descriptions on pages 6-7

Family XYLOPHAGIDAE (xylomyid flies)

Subfamily COENOMYIINAE

Genus **DIALYSIS** Walker
D. sp. Det. 1; Site 1; June 16

Subfamily XYLOPHAGINAE

Genus **RACHICERUS** Walker
R. sp. Det. 1; Site 2; July 23
R. sp. 2 Det. 18; Site 2; June 30

Genus **XYLOPHAGUS** Meigen
X. sp. Det. 1; Site 1; May 26-June 16
X. sp. 2 Det. 2; Site 1, 3; May 26-July 7

Family STRATIOMYIDAE (soldier flies)

Subfamily BERIDINAE

Genus **BERIS** Latreille
B. annulifera (Bigot). Det. 1; Site 1, 3; June 18-July 7

Subfamily STRATIOMYINAE

Tribe STRATIOMYINI

Genus **STRATIOMYS** Geoffroy
S. sp. Det. 1; Site 3; July 28

Family ASILIDAE (robber flies)

Subfamily LEPTOGASTRINAE

Tribe DIOCTRINI

Genus **DIOCTRIA** Meigen
D. baumhaueri Meigen. Det. 18; Site 1; July 2

Subfamily ASILINAE

Tribe LAPHINI

Genus **LAPHRIA** Meigen
L. sp. Det. 2; Site 1, 3; July 2-August 11

Tribe ASILINI

Genus **ASILIS**
A. orphanus Det. 9; Site 2, 3; July 14-September 8

Genus **NEOITAMUS** Osten Sacken
N. flavofemoratus Det. 1; Site 1, 3; July 23-August 25

Family ACROCERIDAE (small headed flies)

Subfamily ACROCERINAE

Genus **OGCODES** Latreille
O. sp. Det. 18; 1995; Site 3; July 14

Genus **ACROCERA** Meigen
A. sp. Det. 18; 1995; Site 3; July 14

Family EMPIDIDAE (dance flies)

Subfamily EMPIDINAE

Genus **EMPIS** Linnaeus
E. sp. Det. 5; Site 1; June 16

Genus **RHAMPHOMYIA** Meigen
R. sp. Det. 18; 1995; Site 2; June 30
R. sp. 2 Det. 18; 1995; Site 3; June 16
R. sp. 3 Det. 5; Site 1, 2, 3; May 19-July 23

Genus **HILARA** Meigen
H. sp. Det. 18; 1995; Site 3; June 2
H. sp. 2 Det. 5; Site 1; July 28

Family DOLICHOPODIDAE (long legged flies)

Subfamily SCIAPODINAE

Genus **CONDYLOSTYLUS** Bigot
C. sp. Det. 1; Site 1, 3; July 9-August 25

Subfamily DOLICHOPODINAE

Genus **DOLICHOPUS** Latreille
D. sp. Det. 1; Site 1, 2, 3; July 2-August 1
D. sp. 2 Det. 2; Site 1; June 27-July 25

Genus **HERCOSTOMNUS** Loew
H. sp. Det. 1; Site 1; July 23

Family SYRPHIDAE (flower flies)

Subfamily MICRODONTINAE

Genus **MICRODON** Meigen
M. abditus Thome. Det. 18; 1995; Site 2; June 24

Subfamily SYRPHINAE

Tribe TOXOMERINI

Genus **TOXOMERUS** Macquart
T. geminatus (Say), 1823. Det. 18; Site 1, 2, 3; April 3-September 15

Tribe MELANOSTOMATINI

Genus **MELANOSTOMA** Schiner
M. mellinum (Linnaeus, 1758). Det. 18; 1993; Site 1, 2; June 16-July 16

Genus **PLATYCHEIRUS** Lepeletier & Serville
P. obscurus (Say, 1824). Det. 18; 1993; Site 1, 3; June 18-27
P. rosarum (Fabricius, 1787). Det. 18; Site 1; June 11
P. sp. Det. 18; 1993; Site 1, 3; July 2-9

Tribe SYRPHINI

Genus **SYRPHUS** Fabricius
S. torvus Osten Sacken, 1875. Det. 18; 1993; Site 1, 2, 3; May 21-June 23

Genus **EPISTROPHE (EPISTROPHE)** Walker
E. grossulariae (Meigen, 1822). Det. 18; 1993; Site 1, 2, 3; August 6-25

Genus **EUPEODES** Osten Sacken
E. sp. Det. 18; Site 1, 3; June 18-July 2

Genus **DASYSYRPHUS** Enderlein
D. venustus (Meigen, 1822). Det. 18; Site 1
D. pauxillus (Meigen). Det. 18; 1995; Site 3

Genus **LEUCOZONA (LEUCOZONA)** Schiner
L. lucorum (Linnaeus, 1758). Det. 18; Site 1; July 5

Genus **XANTHOGRAMMA** Schiner
X. flavipes (Loew). Det. 18; 1995; Site 1, 3; July 18

Genus **MELISCAEVA** Frey
M. cinctella (Zetterstedt, 1843). Det. 18; Site 1; June 27

Genus **DIDEA** Macquart
D. fuscipes Loew. Det. 18; 1995; Site 1; June 16

Subfamily ERISTALINAE

Tribe PIPIZINI

Genus **PIPIZA** Fallén
P. sp. Det. 18; 1993; Site 1; June 20

Tribe RHINGIINI

Genus **FERDINANDEA** Rondani
F. sp. Det. 18; Site 1, 3

Tribe SERICOMYIINI

Genus **SERICOYMIA** Meigen
S. chrysotoxoides Macquart. Det. 18; 1993; Site 1, 3; July 2-16
S. militaris Det. 18; Site 1; July 9

Tribe BRACHYOPINI

Genus **BRACHYOPA** Meigen
B. notata Osten Sacken. Det. 18; 1993; Site 1; July 2

Tribe ERISTALINI

Genus **HELOPHILUS** Meigen
H. fasciatus Walker. Det. 18; 1993; Site 3; May 18

Genus **LEJOTA** Rondani
L. cyanea Det. 18; Site 2, 3; May 26-June 4

Genus **LEJOPS** Rondani
L. lineatus Fabricius. Det. 18; Site 1, 3; June 4-11

Tribe MILESIINI

Genus **TEMNOSTOMA** Lepeletier & Serville
T. alternans Loew. Det. 18; 1993; Site 1; June 25-30
T. vespiforme Det. 1; Site 1; June 11-16

Genus **CHALCOSYRPHUS** Curran
C. vecors Osten Sacken. Det. 18; 1995; Site 2, 3; June 6-16

Genus **SPILOMYIA** Meigen
S. fusca Det. 1; Site 3; July 28

Genus **XYLOTA** Meigen
X. subfasciata Loew. Det. 18; 1995; Site 3; June 16
X. rimaculta Loew. Det. 18; 1995; Site 3; June 13

Genus **BRACHYPALPUS** Macquart
B. oarus (Walker). Det. 18; Site 2, 3; May 12-June 16

Family PIPUNCULIDAE (big headed flies)

Subfamily PIPUNCULINAE

Tribe PIPUNCULINI

Genus **PIPUNCULUS** Latreille
P. sp. Det. 1; Site 1, 2, 3; June 9-September 16

Tribe NEPHROCERINI

Genus **NEPHROCERUS** Zetterstedt
N. sp. Det. 18; 1995; Site 1; June 4

Genus **CHALARUS** Walker
C. sp. Det. 18; 1995; Site 3; June 4

Family LONCHAEIDAE (lonchaeid flies)

Genus **LONCHAEA** Fallén
L. sp. Det. 1; Site 1, 2, 3; June 20-July 28

Family OTITIDAE (picture window flies)

Genus **PSEUDOTEPHRITIS** Johnson
P. sp. Det. 2; Site 2, 3; June 9-July 30

Family TEPHRITIDAE (fruit flies)

Subfamily TEPHRITINAE

Genus **EUROSTA** Loew
E. conspurcata Doane. Det. 1; Site 2; August 19

Family ODINIIDAE (odiniid flies)

Subfamily ODINIINAE

Genus **ODINIA** Robineau-Desvoidy
O. sp. Det. 18; 1995; Site 2; June 4

Family DRYOMYZIDAE (dryomyzid flies)

Subfamily DRYOMYZINAE

Genus **DRYOMYZA** Fallén
D. sp. Det. 18; 1995; Site 1, 2, 3; June 25-October 3
D. sp. 2 Det. 1; Site 1; August 4-September 18

Family HELEOMYZIDAE (heleomyzid flies)

Subfamily HELEOMYZINAE

Genus **ORBELLIA** Robineau-Desvoidy
O. sp. Det. 18; 1995; Site 3; October 20

Genus **AMOEBALERIA** Garrett
A. sp. Det. 18; 1995; Site 1; August 25
A. sp. 2 Det. 2; Site 1; August 29

Genus **HOMONEURA** Wulp
H. sp. Det. 1; Site 1, 2; July 9-September 29

Subfamily SULLINAE

Genus **SULLIA** Robineau-Desvoidy
S. sp. Det. 18; 1995; Site 1, 2, 3; June 2-October 3

Family DROSOPHILIDAE (pomace flies)

Subfamily DROSOPHILINAE

Genus **DROSOPHILA** Fallén
D. sp. Det. 18; 1995; Site 2; July 28

Family CHLOROPIDAE (fruit flies)

Genus **MEDETERA** Fisher von Waldheim
M. sp. Det. 18; 1995; Site 2; July 2

Family SCATHOPHAGIDAE (dung flies)

Genus **SCATHOPHAGA** Meigen
S. furcata Say. Det. 18; 1994; Site 1; June 9
S. stercoraria (Linnaeus). Det. 18; 1994; Site 1, 2, 3; June 4-October 20

Genus **MEGAPHTHALMOIDES** Ringdahl
M. unilineatus (Zetterstedt). Det. 18; 1995; Site 1; August 29

Family MUSCIDAE (house flies)

Subfamily COENOSIINAE

Genus **COENOSIA** Meigen
C. sp. Det. 18; 1995; Site 1; September 29,
C. sp. 2 Det. 18; 1995; Site 2, 3; July 16-25

Subfamily MYDAEINAE

Genus **HELINA** Robineau-Desvoidy
H. aldrichi Snyder. Det. 19; Site 1, 2, 3; May 26-September 15
H. griseogaster Snyder. Det. 19; Site 1, 3; May 14-July 23
H. laxifron (Zetterstedt). Det. 19; Site 1, 2, 3; May 19-August 25
H. sp. Det. 18; 1995; Site 1, 3; June 9-30
H. sp. 2 Det. 18; 1995; Site 1, 2; June 20-August 8

Genus **QUADRULARIA** Hockett
Q. laetifca Robineau-Desvoidy. Det. 19; Site 1, 2, 3; June 9-July 2

Genus **MYDAEA** Robineau-Desvoidy
M. occidentalis Malloch. Det. 19; Site 1, 2, 3; June 9-August 21

Subfamily FANNIINAE

Genus **FANNIA** Robineau-Desvoidy
F. sp. Det. 18; Site 1, 2, 3; June 9-September 29

F. sp. 2 Det. 18; 1995; Site 2, 3; May 21-September 15
F. sp. 3 Det. 18; 1995; Site 2, 3; August 18-27

Subfamily PHAONIINAE

Genus **HYDROTAEA** Robineau-Desvoidy
H. sp. Det. 18; 1995; Site 2; May 26

Genus **LASIOPS**

L. **albibasalis** (Zetterstedt). Det. 19; Site 1, 2, 3; June 30-August 25
L. **spiniger** (Stein). Det. 19; Site 1, 2, 3; June 23-August 18

Genus **PHAONIA** Robineau-Desvoidy

P. **aurea** Malloch. Det. 19; Site 1, 2, 3; July 7-October 20
P. **bysia** (Walker). Det. 19; Site 1, 2, 3; June 18-September 29
P. **brunneinervis** Stein. Det. 19; Site 1, 2, 3; June 16-September 29
P. **completa** Malloch. Det. 19; Site 1, 2, 3; June 16-August 11
P. **sp.** Det. 18; 1995; Site 1, 2, 3; May 19-August 18
P. **sp. 2** Det. 18; Site 3; June 9-August 4

Genus **MUSCINA** Robineau-Desvoidy

M. **sp.** Det. 18; Site 2, 3; August 18-September 15
M. **sp. 2** Det. 18; 1995; Site 3; September 15
M. **sp. 3** Det. 18; 1995; Site 3; July 21-September 29

Subfamily MUSCINAE

Genus **MESEMBRINA** Meigen

M. **latreillii** Robineau-Desvoidy. Det. 19; Site 1, 2; June 18-September 3

Genus **MUSCA** Linnaeus

M. **autumnalis** DeGeer. Det. 19; Site 1, 3; July 23-September 29

Genus **GRAPHOMYA** Robineau-Desvoidy

G. **sp.** Det. 18; 1995; Site 3; October 26

Genus **EUDASYPHORA** Townsend

E. **sp.** Det. 18; 1995; Site 3; July 21-September 29
E. **sp. 2** Det. 18; 1995; Site 3; May 14

Genus **THRICOPS** Rondani

T. **sp.** Det. 18; 1995; Site 1; June 18-July 16

Genus **CARICEA** Robineau-Desvoidy

C. **sp.** Det. 18; 1995; Site 1; June 2
C. **sp. 2** Det. 18; 1995; Site 3; September 1

Genus **SPILOGONA** Schnabl

S. **sp.** Det. 18; 1995; Site 1; June 27

Family CALLIPHORIDAE (blow flies)

Subfamily CALLIPHORINAE

Tribe CALLIPHORINI

Genus **CALLIPHORA** Robineau-Desvoidy

C. **vincina** Robineau-Desvoidy. Det. 4; 1993; Site 1, 2, 3; June 25-August 25
C. **sp.** Det. 1; Site 1, 2, 3; May 26-October 20

Genus **CYNOMYA** Robineau-Desvoidy

C. **cadaverina** Robineau-Desvoidy. Det. 4; 1993; Site 1, 2, 3; June 14-September 29

Tribe POLLENINI

Genus **POLLENIA** Robineau-Desvoidy

P. **sp.** Det. 18; Site 1, 2, 3; July 21-September 17

Family SARCOPHAGIDAE (flesh flies)

Genus **SARCOPHAGA** Meigen

S. **gidae** Det. 18; Site 2, 3; June 25-September 22

Family TACHINIDAE (tachinid flies)

Subfamily TACHININAE

Tribe DEJEANINI

Genus **PARARCHYTAS** Brauer & Bergenstamm

P. **decisus** (Walker). Det. 17; 1993; Site 1; July 9-23

Tribe JURINIINI

Genus **EPALPUS** Rondani

E. **signifer** (Walker). Det. 1; Site 1, 2; May 9-12

Tribe LINNAEMYINI

Genus **LINNAEMYA** Robineau-Desvoidy

L. **glauc**a (Brooks). Det. 17; Site 1, 2, 3; May 12-August 13

Subfamily DEXIINAE

Tribe ZELIINI

Genus **ZELIA** Robineau-Desvoidy

Z. **vertebrata** (Say). Det. 17; Site 2; July 1-August 18

Subfamily GONIINAE

Tribe BLONDELIINI

Genus **LIXOPHAGA** Townsend

L. **sp.** Det. 17; Site 1, 2, 3; May 26-October 18

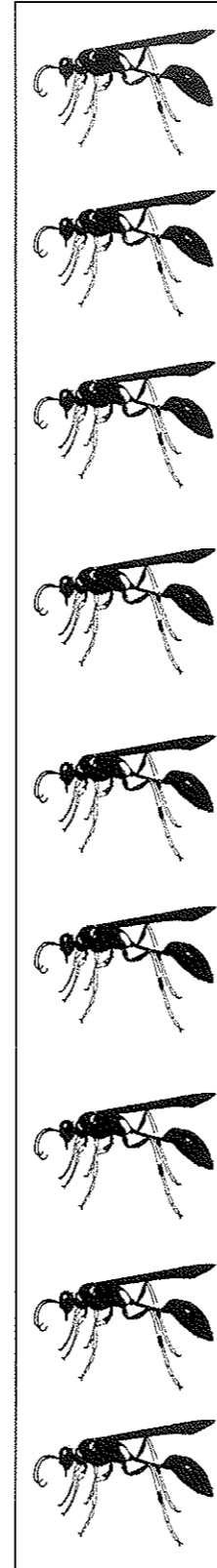
Genus **OSWALDIA** Robineau-Desvoidy

O. **sp.** Det. 17; 1993; Site 1, 2, 3; May 19-September 17

Tribe EXORISTINI

Genus **TACHINOMYIA** Townsend
T. sp. Det. 17; 1993; Site 2, 3; May 21-July 28

Genus **PANZERIA** Robineau-Desvoidy
P. sp. Det. 17; 1993; Site 1, 2, 3; May 12-September 8



ORDER HYMENOPTERA
Wasps

Family PAMPILIIDAE (leaf rolling & web spinning sawflies)

Subfamily CEPHALCIINAE

Tribe CEPHALCIINI

Genus ACANTHOLYDA Costa, 1894 (ITYCORSIA) Konow, 1897

A. maculiventris (Norton, 1869). Det. 8; Host: various species of pine; Site 3; June 25

Subfamily PAMPILIINAE

Tribe PAMPILIINI

Genus PAMPILIUS Latreille, 1802

P. sp. Det. 8; Host: various species of pine; Site 2; August 11

Family ARGIDAE

Subfamily ARGINAE

Genus ARGE Schrank, 1802

Host: serviceberry, poplar, basswood, pear, mountain ash, azalea, birch, ironwood, hornbeam, hazelnut, hawthorn, cherry, willow, poison ivy, rose, alder, oak, & elm

A. sp. Det. 8; Site 1, 2; June 23-July 11

A. sp. 2 Det. 8; Site 2; June 5-August 25

A. sp. 3 Det. 8; Site 2; August 19

Family CIMBICIDAE

Subfamily CIMBICINAE

Tribe CIMBICINI

Genus CIMBEX Olivier, 1790

C. americanus Leach, 1817. (elm sawfly) Det. 2; Host: maple, alder, birch, ironwood, poplar, cherry, willow, basswood & elm; Site 1; May 21-July 8

Family TENTHREDINIDAE

Subfamily SELANDRIINAE

Tribe STRONGYLOGASTRINI

Genus HEMITAXONUS Ashmead, 1898

H. albidopictus (Norton, 1868). Det. 8; Host: ferns, athyrium, noclea & matteuccia; Site 3; May 19

H. sp. Det. 8; Host: ferns, athyrium, noclea & matteuccia; Site 2; May 21

Genus STRONGYLOGASTER Dahlbom, 1835

S. rufigastra (Kincaid, 1900). Det. 8; Host: ferns, dryopteris, thelypteris, gymnocarpium, woodsia, pteridium, woodwardia & osmunda; Site 1; June 16

S. sp. Det. 8; Host: ferns, dryopteris, thelypteris, gymnocarpium, woodsia, pteridium, woodwardia & osmunda; Site 2; May 21

Genus ANEUGMENUS Hartig, 1837

A. flavipes (Norton, 1862). Det. 8; Host: ferns pteridium & thelypteris; Site 1, 3; July 15-16

Subfamily DOLERINAE

Tribe DOLERINI

Genus DOLERUS Panzer, 1801

Host: larvae feed on: horsetails, grasses, sledges & rushes. adults: crataegus, prunus, willow, catkins & sugar maple sap.

D. similis similis (Norton, 1861). Det. 8; Host: equisetum; Site 2; May 18

D. sp. Det. 8; Site 2; May 7

Subfamily NEMATINAE

Tribe CLADIINI

Genus PRIOPHORUS Dahlbom, 1835

Host: birch, willow, rubus, cherry and alder

P. sp. Det. 8; Site 1; June 16-30

Tribe NEMATINI

Genus HOPLOCAMPA Hartig, 1837

Host: developing fruit of serviceberry, apple, cherry, hawthorn and pear

H. nr. halcyon (Norton, 1861). Det. 8; Site 1, 2; May 19-June 9

H. testudinea (Klug, 1814). (european apple sawfly) Det. 8; Host: malus malus (apples); Site 1; June 9

Genus PACHYNEMATUS Konow, 1890

Host: wheat, sedges, festuca, grass, and willow

P. sp. Det. 8; Site 1; June 16-23

P. sp. 2 Det. 8; Site 1; June 11-18

Genus PRISTIPHORA Latreille, 1810

P. sp. Det. 8; Site 1; July 1

Genus NEMATUS Panzer, 1801

N. sp. Det. 8; Site 2; May 10

Genus AMAURONEMATUS Konow, 1890

A. sp. Det. 8; Site 1; June 9

A. sp. 2 Det. 8; Site 2; May 7

Subfamily HETERARTHRIINAE

Tribe FENUSINI

Genus MESSA Leach, 1817

M. nana (Klug, 1814). Det. 8; Site 1, 3; June 4-13

Subfamily BLENNOCAMPINAE

Tribe PHYMATOCERINI

Genus RHADINOCERAEA Konow, 1886 (VERATRA) Smith, 1969

R. nubilipennis (Norton, 1867). Det. 8; Site 2; May 21

Genus EUTOMOSTETHUS Enslin, 1914

E. luteiventris (Klug, 1814). Det. 8; Host: poa, other soft grasses and rushes; Site 2; May 21

Subfamily ALLANTINAE

Tribe EMPRIINI

Genus **EMPRIA** Lepeletier, 1828

E. sp. Det. 8; Host: birch, hazelnut, strawberry, potentilla, rubus, rose and alder; Site 3; May 21

E. candidata (Fallén, 1807). Det. 8; Host: birch, hazelnut, strawberry, potentilla, rubus, rose and alder; Site 1; June 6

Tribe ALLANTINI

Genus **TAXONUS** Hartig, 1837

T. terminalis (Say, 1824). Det. 8; Host: rosaceae; Site 1, 3; May 19-27

Tribe TENTHREDOPSINI

Genus **AGLAOSTIGMA** Kirby, 1882

A. quattuordecimpunctatum (Norton, 1862). Det. 8; Host: podophyllum peltatum; Site 1, 2; May 26-July 7

Tribe TENTHREDININI

Genus **TENTHREDO** Linnaeus, 1758

Host: bracken fern, athyrium, petasites, tussilago, brassica, lamium, mint, fireweed, honeysuckle, hazelnut, rose, willow, mountain ash, viburnum, filipendula, cherry, plum, alder, hypericum, circaea, heracleum, scrophilaria, verbascum, ash, jasminium, ligustrum, symphoricarpos, lilac, oreganum and clover

Species Group Basilaris

T. fernaldii MacGillivray, 1900. Det. 8; Site 2, 3; July 21-August 16

Species Group Semirufa

T. concessa Norton, 1869. Det. 8; Site 1, 3; June 27-July 2

Species Group Rufopecta

T. mellicoxa Provancher, 1878. Det. 8; Site 2; June 1

Species Group Originalis

T. orginalis (Norton, 1867). Det. 8; Site 1; June 20

Tribe MACROPHYINI

Genus **MACROPHYA** Dahlbom, 1835

M. sp. Det. 8; Site 1; August 11

Family SIRICIDAE (horntail wasps)

Subfamily TREMICINAE

Genus **TREMEX** Jurine, 1807

Host: maple, elm, oak, hickory, beech, and other deciduous trees

T. columba (Linnaeus, 1763). (pigeon tremex) Det. 2; Site 3; September 3

Family XIPHYDRIIDAE (wood wasps)

Subfamily XIPHYDRIINAE

Genus **XIPHYDRIA** Latreille, 1802

Host: branches of basswood, elm, hickory, birch, hophornbeam, ash, oak, beech, hawthorn, sumac, plum and cherry

X. maculata Say, 1836. Det. 8; Site 3; June 30

Family AULACIDAE

Genus 1

Det. 14; Site 2; June 18-25

Genus 2

Det. 14; Site 3; June 12-30

Family BRACONIDAE

Subfamily AGATHIDINAE

Genus **EARINUS** Wesmael, 1838

E. sp. Det. 14; 1995; Site 1, 2, 3; May 21-September 13

Subfamily BLACINAE

Genus **EUBAZUS** Nees, 1814

E. sp. Det. 14; 1995; Site 1; June 11-June 16

Subfamily BRACONINAE

Genus **BRACON** Fabricius, 1804

B. sp. Det. 14; 1995; Site 2; June 16-June 16

Subfamily CHELONINAE

Genus **PHANEROTOMA** Wesmael, 1838

P. sp. Det. 14; 1995; Site 2, 3; May 21-June 30

Subfamily DORYCTINAE

Genus **DORYCTES** Haliday, 1836

D. sp. Det. 14; 1995; Site 2; August 25-August 25

Subfamily EUPHORINAE

Genus **PERISTENUS** Foerster, 1862

P. sp. Det. 14; 1995; Site 2; May 21-May 21

Subfamily HOMOLOBINAE

Genus **HOMOLOBUS** Foerster, 1862

H. sp. Det. 14; 1995; Site 2; September 17-October 17

Subfamily MACROCENTRINAE

- Genus **MACROCENTRUS** Curtis, 1833
M. sp. Det. 14; 1995; Site 2, 3; August 11-August 25
M. sp. 2 Det. 14; 1995; Site 1, 2, 3;

Subfamily ROGADINAE

- Genus **ALEIODES** Wesmael, 1838
A. sp. Det. 14; 1995; Site 2, 3; June 16-July 14
A. sp. 2 Det. 14; 1995; Site 2, 3; June 23-July 23

- Genus **CLINOCENTRUS** Haliday, 1833
C. sp. Det. 14; 1995; Site 2; August 21-August 21

Subfamily ZELEINAE

- Genus **ZELE** Curtis, 1832
Z. sp. Det. 14; 1995; Site 1; August 6-August 20

Family ICHNEUMONIDAE

Subfamily PIMPLINAE

Tribe PIMPLINI

- Genus **DOLICHOMITUS** Smith, 1877
D. imperator (Kriechbaumer, 1854). Det. 14; 1995; Site 3; June 11

Tribe ECHTHROMORPHINI

- Genus **ISEROPUS** Foerster, 1868
I. coelebs (Walsh, 1873). Det. 14; 1995; Site 3; July 14

- Genus **COCCYGOMIMUS** Saussure, 1890
C. aequalis (Provancher, 1880). Det. 14; 1995; Site 1, 3; July 7
C. annulipes (Brulle, 1846). Det. 14; 95; Site 2, 3; April 17-May 19
C. aquilonius (Cresson, 1870). Det. 14; 1995; Site 2; June 2-October 26
C. pedalis (Cresson, 1865). Det. 14; 1995; Site 1, 2, 3; May 19-November 10

Tribe NEOXORIDINI

- Genus **PODOSCHISTUS** Townes, 1960
P. vittifrons (Cresson, 1868). Det. 14; 1995; Site 3; June 16

Tribe RHYSSINI

- Genus **RHYSSA** Gravenhorst, 1829
R. howdenorum Townes, 1960. Det. 14; 1995; Site 1; July 14

- Genus **MEGARHYSSA** Ashmead, 1900
M. macrurus macrurus (Linnaeus, 1771). Det. 2; Site 3; September 4

Subfamily LABENINAE

Tribe PHYTODIETINI

- Genus **NETELIA** Gray, 1860 (**PAROPHELTES**) Cameron, 1907
Det. 14; 1995; Site 1; July 31

- Genus **NETELIA** Gray, 1860 (**PARABATES**) Foerster, 1868
Det. 14; 1995; Site 1, 3; July 25-August 6

- Genus **NETELIA** Gray, 1860 (**PROSTHODOCIS**) Enderlein, 1912
Det. 14; 1995; Site 2; June 25

- Genus **ERROMENUS (ERROMENUS)** Holmgren, 1857
E. sp. Det. 14; 1995; Site 1; June 16
E. sp. 2 Det. 14; 1995; Site 1; August 11

Subfamily CRYPTINAE

Tribe HEMITELINI

Subtribe HEMITELINA

- Genus **AROTREPES** Townes, 1970
A. sp. Det. 14; 1995; Site 1; June 4

Subtribe GELINA

- Genus **GELIS** Thunberg, 1827
G. sp. Det. 14; 1995; Site 2; May 28
G. sp. 2 Det. 14; 1995; Site 1; August 25
G. sp. 3 Det. 14; 1995; Site 3; June 25

Subtribe ENDASEINA

- Genus **ENDASYS** Foerster, 1868
E. rotundiceps (Provancher, 1877). Det. 14; 1995; Site 1; August 11

- Genus **ORTHIZEMA** Foerster, 1868
O. sp. Det. 14; 1995; Site 3; November 27

Subtribe PHYGADEUONTINA

- Genus **SULCARIUS** Townes, 1970
S. sp. Det. 14; 1995; Site 1; June 2

- Genus **PHYGADEUON** Gravenhorst, 1829
P. sp. Det. 14; 1995; Site 2, 3; June 2-6

Tribe APTESINI

Genus **CUBOCEPHALUS** Ratzeburg, 1848

- C. sp.** Det. 14; 1995; Site 1, 3; June 16-July 2
- C. atriclunis** Townes & Gupta, 1962. Det. 14; 1995; Site 2; July 7
- C. denticulatus denticulatus** Townes, 1962. Det. 14; 1995; Site 1; July 16-August 11

Genus **ECHTHRUS** Gravenhorst, 1829

- E. abdominalis** Cresson, 1868. Det. 14; 1995; Site 1; June 30

Tribe CRYPTINI

Subtribe AGROTHEREUTINA

Genus **AGROTHEREUTES** Foerster, 1850

- A. abbreviator** (Fabricius). **similaris** (Provancher, 1886). Det. 14; 1995; Site 3; August 4
- A. cimbcivorus** (Cushman, 1924). Det. 14; 1995; Site 2; August 18

Genus **TRYCHOSIS** Foerster, 1868

- T. albitarsis** (Cresson, 1864). Det. 14; 1995; Site 3; July 28

Subtribe CRYPTINA

Genus **XYLOPHRURUS** Foerster, 1868

- X. nubilipennis** (Cresson, 1864). Det. 14; 1995; Site 1, 2; May 27-June 6

Subtribe GORYPHINA

Genus **LISTROGNATHUS (LISTROGNATHUS)** Tschek, 1870

- L. albomaculatus albomaculatus** (Cresson, 1864). Det. 14; Site 3; August 6

Subfamily ACAENITINAE

Tribe COLEOCENTRINI

Genus **COLEOCENTRUS** Gravenhorst, 1829

- C. flavipes** (Provancher, 1874). Det. 14; 1995; Site 2; June 16
- C. harringtoni** Cushman, 1920. Det. 14; 1995; Site 1; June 9
- C. pettiti** Cresson, 1868. Det. 14; 1995; Site 3; June 2

Subfamily ICHNEUMONINAE

Tribe PHAEOGENINI

Subtribe PHAEOGENINA

Genus **DIADROMUS** Wesmael, 1845

- D. sp.** Det. 14; 1995; Site 2; June 18
- D. sp. 2** Det. 14; 1995; Site 1, 2, 3; August 11-25
- D. sp. 3** Det. 14; 1995; Site 1; August 13

Genus **PHAEOGENES** Wesmael, 1845

- P. sp.** Det. 14; 1995; Site 1, 2, 3; May 12-August 25

Tribe GYRODONTINI

Subtribe GYRODONTINA

Genus **CRATICHNEUMON** Thomson, 1893

- C. paratus** (Say, 1829). Det. 14; 1995; Site 3; June 20
- C. puncticoxa** Heinrich, 1961. Det. 14; 1995; Site 2; August 8

C. pteridis Townes, 1944. Det. 14; 1995; Site 1; July 16

C. sublatus (Cresson, 1864). Det. 14; 1995; Site 2, 3; June 27-September 3

C. w-album (Cresson, 1864). Det. 14; 1995; Site 1, 3; July 25-August 25

Genus **MELANICHNEUMON** Thomson, 1893

M. indecoratus Heinrich, 1962. Det. 14; 1995; Site 2; June 25

M. absconditus (Provancher, 1886). Det. 14; 1995; Site 1; August 11

Genus **BARICHNEUMON** Thomson, 1893

B. sp. Det. 14; 1995; Site 1; July 7

Subtribe AMBLYTELESINA

Genus **NEAMBLYMORPHA** Heinrich, 1961

N. milva (Cresson, 1867). Det. 14; 1995; Site 1; June 23-July 28

Genus **EUTANYACRA** Cameron, 1903

E. vilissima Heinrich, 1961. Det. 14; 1995; Site 3; September 15

Genus **SPILICHNEUMON** Thomson, 1894

S. bronteus (Cresson, 1864). Det. 14; 1995; Site 1; June 20

Subtribe PTEROCORMINA

Genus **PTEROCORMUS** Foerster, 1850

P. chasmodops (Heinrich, 1961). Det. 14; 1995; Site 1, 2; August 18-September 10

P. feralis (Cresson, 1867). Det. 14; 1995; Site 1, 2, 3; June 11-August 25

P. lachrymans (Provancher, 1875). Det. 14; 1995; Site 1, 2; August 15-September 15

P. nereni (Thomson). Det. 14; 1995; Site 3; August 8

P. nigrovariegatus (Provancher, 1875). Det. 14; 1995; Site 1; July 28

P. pusillamoenus (Heinrich, 1961). Det. 14; 1995; Site 1; June 9

P. ultimus (Cresson, 1877). Det. 14; 1995; Site 3; July 28

Tribe ICHNEUMONINI

Subtribe ICHNEUMONINA

Genus **PROTICHNEUMON** Thomson, 1893

P. grandis (Brulle, 1846). Det. 14; 1995; Site 3; August 28

Tribe PLATYLABINI

Genus **PLATYLABUS** Wesmael, 1845

P. luteatae Heinrich, 1962. Det. 14; 1995; Site 1; August 18

P. ornatus (Provancher, 1875). Det. 14; 1995; Site 1; September 10

Subfamily BANCHINAE

Tribe GLYPTINI

Genus **GLYPTA** Gravenhorst, 1829

G. sp. Det. 14; 1995; Site 2; June 25

Tribe LISSONOTANINI

Genus **LISSONOTA** Gravenhorst, 1829

L. sp. Det. 14; 1995; Site 1; May 27

L. sp. 2 Det. 14; 1995; Site 2; May 12

- L. sp. 3 Det. 14; 1995; Site 2; August 1
L. sp. 4 Det. 14; 1995; Site 1, 3; June 2-9
L. sp. 5 Det. 14; 1995; Site 2, 3; May 26

Subfamily CTENOPELMATINAE
Tribe PERILISSINI

Genus **SYZEUCTUS** Foerster, 1868
S. sp. Det. 14; 1995; Site 3

Genus **TREMATOPYGODES** Aubert, 1968
T. sp. Det. 14; 1995; Site 2; June 4

Genus **OPHELTES** Holmgren, 1859
O. **glaucopterus** (Linnaeus). **flavipennis** (Provancher, 1874). Det. 14; 1995; Site 2; August 29-September 10

Tribe MESOLEIINI

Genus **ALEXETER** Foerster, 1868
A. sp. Det. 14; 1995; Site 1; November 10

Tribe EURYPROCTINI

Genus **PHOBETES** Foerster, 1868
P. sp. Det. 14; 1995; Site 1; September 1

Genus **EURYPROCTUS** Holmgren, 1857
E. sp. Det. 14; 1995; Site 1; June 9-16

Subfamily ANOMALONINAE
Tribe GRAVENHORSTIINI

Genus **AGRYPON** Foerster, 1860
A. sp. Det. 14; 1995; Site 3; June 25

Genus **TRICHIONOTUS** Cameron, 1905
T. sp. Det. 14; 1995; Site 3; August 18

Subfamily CAMPOPLEGINAE
Tribe CAMPOPLEGINI

Genus **CASINARIA** Holmgren, 1859
C. sp. Det. 14; 1995; Site 3; September 1

Genus **DUSONA** Cameron, 1901
D. sp. Det. 14; 1995; Site 1, 3; June 27-August 27
D. sp. 2 Det. 14; 1995; Site 2; October 17

Genus **XYLOPHYLAT (XYLOPHYLAT)** Kriechbaumer, 1878
X. **macrocephala** (Provancher, 1874). Det. 14; 1995; Site 2; June 11

Subfamily OPHIONINAE
Tribe OPHIONINI

Genus **OPHION** Fabricius, 1798
O. **bilineatus** Say, 1829. Det. 14; 1995; Site 3; June 16
O. sp. Det. 14; 1995; Site 1; June 16
O. **slossonae** Davis, 1893. Det. 14; 1995; Site 2, 3; August 20-28

Tribe ENICOSPILINI

Genus **THYREODON** Brulle, 1846
T. **atricolor** (Olivier, 1811). Det. 14; 1995; Site 2; August 19

Genus **ENICOSPILUS** Stephens, 1829
E. **americanus** (Christ, 1791). Det. 14; 1995; Site 3; August 18
E. **arcuatus** (Felt, 1902). Det. 14; 1995; Site 3; September 3

Subfamily MESOCHORINAE

Genus **ASTIPHROMMA** Foerster, 1868
A. sp. Det. 14; 1995; Site 2; September 29

Genus **MESOCHORUS** Gravenhorst, 1829
M. sp. Det. 14; 1995; Site 2; August 11

Subfamily DIPLAZONTINAE

Genus **SYRPHOPHILUS** Dasch, 1964
S. **bizonarius** (Gravenhorst, 1829). Det. 14; 1995; Site 1; June 16-30

Genus **DIPLAZON** Viereck, 1914
D. **pectoratorius** (Thunberg, 1822). Det. 14; 1995; Site 1; June 11

Genus **SUSSABA** Cameron, 1909
S. **elongata** (Provancher, 1874). Det. 14; 1995; Site 1; September 8

Subfamily OXYTORINAE

Genus **OXYTORUS** Foerster, 1868
O. **antennatus** (Cresson, 1864). Det. 14; 1995; Site 1; June 27
O. **albopleuralis** (Provancher, 1879). Det. 14; 1995; Site 2; September 19

Genus **CYLLOCERIA** Schiodte, 1839
C. **melancholica** (Gravenhorst). Det. 14; 1995; Site 1, 2, 3; June 4-September 15

Subfamily ORTHOCENTRINAE

Genus **ORTHOCENTRUS** Gravenhorst, 1829
O. sp. Det. 14; 1995; Site 1; June 30

Family PELECINIDAE

Genus **PELECINUS** Latreille, 1800
P. **polyturator** (Drury, 1773). Det. 2; Site 3; August 28

Family CHRYSIDIDAE (cuckoo wasps)

Subfamily ELAMPINAE

- Genus **OMALUS** Panzer, 1801
O. sp. Det. 11; 1994; Site 2, 3; June 4-September 15
O. sp. 2 Det. 11; 1994; Site 2, 3; May 21-July 7

Subfamily CHRYSIDIDINAE

Tribe CHRYSIDIDINI

- Genus **CHRYSIS** Linnaeus, 1761
C. sp. Det. 11; 1994; Site 3; July 28
C. sp. 2 Det. 11; 1994; Site 3; June 30

Family PEMPHREDONIDAE (aphid wasps)

Subfamily PEMPHREDONINAE

Tribe PEMPHREDONINI

- Genus **STIGMUS** Panzer, 1804
S. americanus Packard, 1867. Det. 1; Site 1, 2; June 23-October 1991
S. fraternus Say, 1824. Det. 1; Site 1, 2; June 16-July 16
S. sp. 3 Det. 2; Site 1; July 23

Family CRABRONIDAE

Subfamily CRABRONINAE

Tribe CRABRONINI

- Genus **ECTEMNIUS** Dahlbom, 1845
E. maculosus (Gmelin, 1790). Det. 1; Site 3; August 18
E. sp. Det. 1; Site 2; July 28

Family NYSSONIDAE (sand wasps)

Subfamily NYSSONINAE

Tribe MELLININI

- Genus **MELLINUS** Fabricius, 1790
M. bimaculata Packard 1867. Det. 15; Site 2; August 24

Family COLLETIDAE

Subfamily HYLAEINAE (yellow-faced bees)

- Genus **HYLAEUS** Fabricius, 1793
H. sp. Det. 7; 1995; Site 3; June 25-July 9

Family HALICTIDAE (sweat bees)

Subfamily HALICTINAE

Tribe AUGOCHLORINI

- Genus **AUGOCHLORA** Smith, 1853
A. pura pura (Say, 1837). Det. 7; Site 2; September 17

Tribe HALICTINI

- Genus **DIALICTUS** Robertson, 1902
D. sp. 1 Det. 7; Site 1, 2, 3; May 26-August 6

Family ANDRENIDAE

Subfamily ANDRENINAE

- Genus **ANDRENA** Fabricius, 1775
A. sp. Det. 7; 1995; Site 1, 2, 3; May 18-July 1
A. sp. 2 Det. 7; Site 1, 2, 3; May 19-July 9

- Genus **ANDRENA** Fabricius, 1775 (**MELANDRENA**) Perez, 1890
A. vicina Smith, 1853. Det. 2; Site 2; May 10

Family ANTHOPHORIDAE

Subfamily NOMADINAE (cuckoo bees)

Tribe NOMADINI

- Genus **NOMADA** Scopoli, 1770
N. sp. 1 Det. 7; 1995; Site 2, 3; May 21
N. sp. 2 Det. 7; 1995; Site 1; June 9

Family APIDAE

Subfamily BOMBINAE (bumble bees)

Tribe BOMBINI

- Genus **BOMBUS** Latreille, 1802
B. terricola Kirby, 1837. Det. 9; Site 2; May 18
B. ternarius Say, 1837. Det. 15; Det. 9; 1992; Site 2; May 18

Family POMPILIDAE (spider wasps)

Subfamily PEPSINAE

Tribe AGENIELLINI

- Genus **AUPLOPUS** Spinola, 1841
A. architecta (Say, 1836). Det. 1; Site 2, 3; July 2-August 25

- Genus **ANOPLIUS** Dufour, 1834
A. sp. Det. 1; Site 2; May 10-21

Family VESPIDAE

Subfamily EUMENINAE (potter wasps)

Genus EUODYNERUS Dalla Torre, 1904
E. sp. Det. 2; Site 1; June 23

Subfamily VESPINAE (yellow jackets)

Genus VESPULA Thomson, 1869

V. maculifrons (Buysson, 1905). (eastern yellow jacket) Det. 9; 1991; Site 2; October 4

V. consobrina (Saussure, 1864). (black jacket) Det. 16; Site 2; August 4-19

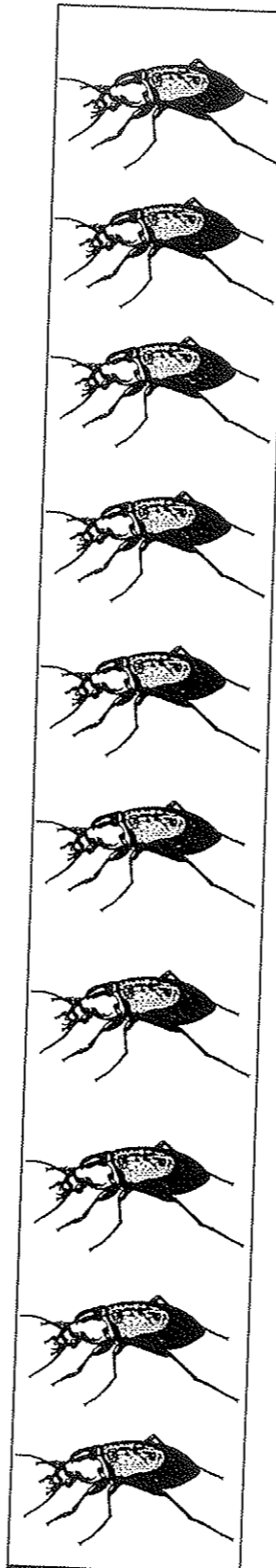
V. vulgaris (Linnaeus, 1758). (common yellow jacket) Det. 16; Site 2, 3; September 15-22

Genus DOLICHOVESPULA Rohwer, 1916

D. norvegicoides (Sladen, 1918). (aboreal yellow jacket) Det. 16; Site 1; August 19-November 10

D. maculata (Linnaeus, 1763). (bald-faced hornet) Det. 2; Site 2, 3; May 21-September 29

D. arenaria (Fabricius, 1775). (aerial yellow jacket) Det. 1; Site 1, 2; July 16-August 25



ORDER COLEOPTERA
Beetles

Family CARABIDAE (ground beetles)

Tribe NEBRIINI

Genus **NEBRIA** Latreille, 1802

- N. lacustris lacustris** Casey, 1913. Det. 1; Site 2; August 15
- N. pallipes** Say, 1825. Det. 1; Site 2; August 18-September 5

Tribe NOTIOPHILINI

Genus **NOTIOPHILUS** Dumeril, 1806

- N. aeneus** (Herbst, 1806). Det. 2; Site 2, 3; June 9-20
- N. nemoralis** Fall, 1906. Det. 6; 1991; Site 1, 2, 3; June 20-August 27

Tribe LORICERINI

Genus **LORICERA** Latreille, 1802

- L. pilicornis** (Fabricius, 1775). Det. 1; Site 1; June 16

Tribe CARABINI

Genus **CALOSOMA** Weber, 1801

- C. frigidum** Kirby, 1837. Det. 1; Site 2; May 26

Genus **CARABUS** Linnaeus, 1758

- C. nemoralis** Müller, 1764. Det. 6; Site 3; June 16-August 15
- C. serratus** Say, 1823. Det. 6; Site 3; June 27-August 21

Tribe CYCHRINI

Genus **SPHAERODERUS** Dejean, 1826

- S. canadensis canadensis** Chaudoir, 1861. Det. 6; Site 2, 3; June 20-27
- S. nitidicollis brevoorti** LeConte, 1848. Det. 6; Site 1; June 20-August 4
- S. stenostomus lecontei** Dejean, 1826. Det. 6; Site 2, 3; June 20-July 16

Genus **SCAPHINOTUS** Dejean, 1826

- S. viduus** (Dejean, 1826). Det. 6; Site 2; June 20

Tribe ELAPHRINI

Genus **ELAPHRUS** Fabricius, 1775

- E. clairvillei** Kirby, 1837. Det. 1; Site 1; August 11

Tribe CLIVININI

Subtribe CLIVININA

Genus **CLIVINA** Latreille, 1802

- C. fossor** (Linnaeus, 1758). Det. 6; Site 1; July 7

Tribe TRECHINI

Genus **TRECHUS** Clairville, 1806

- T. apicalis** Motschoulsky, 1845. Det. 1; Site 1, 2, 3; May 21-August 4

T. crassiscapus Lindroth, 1955. Det. 6; Site 1; June 16-August 25

Tribe BEMBIDIINI

Genus **BEMBIDION** Latreille, 1802

- B. versicolor** (LeConte, 1848). Det. 1; Site 2; October 3
- B. semicinctum** Notman, 1919. Det. 1; Site 3; June 13-25
- B. wingatei** Bland, 1863. Det. 1; Site 1, 2; July 28-August 29

Tribe PATROBINI

Genus **PATROBUS** Dejean, 1821

- P. longicornis** (Say, 1825). Det. 1; Site 2, 3; August 1-September 27
- P. foveocollis** (Eschscholtz, 1823). Det. 1; Site 1, 2; June 16-August 11

Tribe PTEROSTICHINI

Genus **POECILUS** Bonelli, 1810

- P. lucublandus** (Say, 1823). Det. 6; Site 1, 3; May 19-September 9

Genus **GASTRELLARIUS** Casey, 1918

- G. honestus** (Say, 1823). Det. 1; Site 1, 2, 3; May 23-September 8

Genus **MYAS** Dejean, 1828

- M. cyanescens** Dejean, 1828. Det. 6; Site 3; June 13-July 30

Genus **PTEROSTICHUS** Bonelli, 1810

- P. commutabilis** (Motschoulski, 1866). Det. 1; Site 1; June 18
- P. patruelis** (Dejean, 1831). Det. 1; Site 3; June 4-13
- P. adstrictus** Eschscholtz, 1823. Det. 6; Site 1, 2; June 11-29
- P. mutus** (Say, 1823). Det. 6; Site 3; June 16
- P. pennsylvanicus** LeConte, 1873. Det. 6; Site 2, 3; June 20-July 14
- P. diligendus** (Chaudoir, 1868). Det. 6; Site 2, 3; June 6-July 25
- P. corluginus** (Newman, 1838). Det. 6; Site 2, 3; June 13-September 1
- P. lachrymosus** (Newman, 1838). Det. 1; Site 3; June 2-July 11
- P. melanarius** (Illiger, 1798). Det. 1; Site 1, 2, 3; July 23-September 1
- P. stygicus** (Say, 1823). Det. 6; Site 2, 3; June 6-August 18
- P. punctatissimus** (Randall, 1838). Det. 6; Site 1; June 9-11
- P. rostratus** (Newman, 1838). Det. 6; Site 2, 3; June 27-October 25
- P. adoxus** (Say, 1823). Det. 6; Site 2, 3; June 30-July 14
- P. tristis** (Dejean, 1828). Det. 1; Site 2; June 20-August 11
- P. brevicornis** (Kirby, 1837). Det. 1; Site 1; July 7-August 25
- P. pinguedineus** (Eschscholtz, 1823). Det. 1; Site 1, 3; June 23-July 16

Tribe ZABRINI

Genus **PSEUDAMARA** Lindroth, 1968

- P. arenaria** (LeConte, 1848). Det. 1; Site 1, 3; June 11-July 21

Genus **AMARA** Bonelli, 1810

- A. lunicollis** Sciodte, 1837. Det. 6; Site 1; July 2

Tribe LICININI

Subtribe DICAELINA

Genus **DICAELUS** Bonelli, 1813

D. politus Dejean, 1826. Det. 1; Site 3; June 11-July 4

Tribe HARPALINI

Subtribe ANISODACTYLINA

Genus **NOTIOBIA** Perty, 1830

N. terminata (Say, 1823). Det. 1; Site 2; September 5

Subtribe STENOLOPHINA

Genus **STENOLOPHUS** Dejean, 1821

S. comma (Fabricius, 1775). Det. 6; Site 1; July 11

Genus **BRADYCELLUS** Erichson, 1837

B. lugubris (Leconte, 1848). Det. 1; Site 1, 2, 3; May 23-July 7

Subtribe HARPALINA

Genus **HARPALUS** Latreille, 1802

H. fulvilabris Mannerheim, 1853. Det. 1; Site 3; May 21

H. caliginosus (Fabricius, 1775). Det. 6; Site 1; August 15

H. somnulentus Dejean, 1829. Det. 2 & 10; Site 2, 3; May 26-July 7

Tribe PLATYNINI

Subtribe SPHODRINA

Genus **CALATHUS** Bonelli, 1810

C. gregarius (Say, 1823). Det. 1; Site 2; August 4

C. ingratus Dejean, 1828. Det. 6; Site 1, 2; June 13 July 30

Genus **SYNUCHUS** Gyllenhal, 1810

S. inpuctatus (Say, 1823). Det. 6; Site 2, 3; June 20-July 21

Subtribe PLATYNINA

Genus **OLISTHOPUS** Dejean, 1828

O. parmatus (Say, 1823). Det. 1; Site 3; July 7

Genus **AGONUM** Bonelli, 1810

A. palustre Goulet, 1969. Det. 6; Site 2, 3; May 2-October 13

A. retractum LeConte, 1848. Det. 1; Site 2, 3; June 27-August 15

A. sordens Kirby, 1837. Det. 1; Site 1; September 13

A. superioris Lindroth, 1966. Det. 1; Site 2; June 23

A. cupripenne (Say, 1823). Det. 1; Site 2; July 17

A. fidele Casey, 1920; Det. 6; Site 3; June 6-23

A. harrisi LeConte, 1848. Det. 1; Site 1; June 18

A. melanarium Dejean, 1828. Det. 1; Site 2; August 25

A. octopunctatum (Fabricius, 1798). Det. 1; Site 1; June 18

A. trigeminum Lindroth, 1954. Det. 1; Site 3; May 28

Genus **PLATYNUS** Bonelli, 1810

P. decentis (Say, 1823). Det. 6; Site 1, 2; May 23-September 13

P. tenuicollis (LeConte, 1848). Det. 1; Site 2; July 2

P. mannerheimi (Dejean, 1828). Det. 1; Site 1, 2; May 14-October 4

Tribe LEBIINI

Subtribe CYMINDIDINA

Genus **CYMINDIS** Latreille, 1806

C. cribricollis Dejean, 1831. Det. 6; Site 2, 3; June 27-July 23

Subtribe DROMIINA

Genus **DROMIUS** Bonelli, 1810

D. piceus Dejean, 1831. Det. 1; Site 2; June 18-October 13

Genus **SYNTOMUS** Hope, 1838

S. americanus (Dejean, 1831). Det. 6; Site 1, 3; June 20-July 14

Family LEPTODIRIDAE (small carrion beetles)

Subfamily CATOPINAE

Tribe CATOPINI

Genus **CATOPS** Paykull, 1798

C. basilaris Say. Det. 1; Site 1, 2, 3; June 9-July 23

Tribe PTOMAPHAGINI

Genus **PTOMAPHAGUS** Illiger, 1798

P. consobrinus Det. 1; Site 3; May 14-July 23

Family LEIODIDAE (round fungus beetles)

Tribe AGATHIDIINI

Genus **ANISOTOMA** Panzer, 1797

A. sp. Det. 1; Site 2, 3; June 11-September 15

A. sp. 2 Det. 1; Site 3; August 4

Family SILPHIDAE (carrion beetles)

Subfamily SILPHINAE

Tribe NECRODINI

Genus **NECRODES** Leach, 1815

N. surinamensis (Fabricius). Det. 2; Site 3; July 21

Tribe SILPHINI

Genus **SILPHA** Linnaeus, 1758

S. americana Linnaeus. Det. 2; Site 3; May 14

Subfamily NICROPHINAE (sexton beetles)

Tribe NICROPHORINI

Genus **NICROPHORUS** Fabricius, 1775

N. pustulatus Hersch. Det. 2; Site 3; August 8-September 15

N. sayi Castelnau. Det. 2; Site 1, 2, 3; May 26-September 19

N. orbicollis Det. 2; Site 2, 3; June 18-October 24
N. tomentosus Weber. Det. 2; Site 2, 3; July 24-August 25

Family STAPHYLINIDAE (rove beetles)

Subfamily OMALIINAE

Tribe ANTHOPHAGINI

Genus **BRATHINUS** LeConte, 1852
B. nitiditus LeConte. (grassroot beetle) Det. 1; Site 1; July 14-August 20

Tribe ARPEDIOMIMINI

Genus **ARPEDIUM** Erichson, 1839
A. sp. Det. 10; Site 1, 2; May 26-June 25

Subfamily PAEDERINAE

Tribe PAEDERINI

Subtribe LATHROBIINA

Genus **LATHROBIUM** Gravenhorst, 1802
L. sp. Det. 10; Site 1, 2, 3; June 6-August 4

Subfamily STAPHYLININAE

Tribe STAPHYLININI

Subtribe PHILONTHINA

Genus **PHILONTHUS** Curtis, 1829
P. cyanipennis (Fabricius). Det. 1; Site 3; July 23
P. sp. Det. 2; Site 2; July 25

Subtribe QUEDIINA

Genus **QUEDIUS** Stephens, 1829
Q. peregrinus Gray. Det. 10; Site 3; July 16
Q. sp. 2 Det. 2; Site 1, 2, 3; June 11-August 27
Q. sp. 3 Det. 10; Site 1, 2, 3; June 18-September 22

Subtribe STAPHYLININA

Genus **STAPHYLINUS** Linnaeus, 1758
S. badipes LeConte. Det. 1; Site 3; September 19
S. maculosus Gravenhorst. Det. 1; Site 1, 2, 3; May 19-September 10

Genus **PLATYDRACUS** Thomson, 1858
P. violaceus (Gravenhorst). Det. 1; Site 3; June 11-July 16
P. viridanus Horn. Det. 2; Site 2, 3; July 21-September 1
P. sp. Det. 2; Site 3; July 16
P. sp. 2 Det. 2; Site 3; June 30-July 25

Subfamily TACHYPORINAE (crab-like rove beetles)

Tribe TACHYPORINI

Genus **TACHINAS** Gravenhorst, 1802
T. fimbriatus Gravenhorst. Det. 1; Site 2, 3; July 16-September 29

T. elongatus Gyllenhal. Det. 10; 1989; Site 1; June 27-August 4
T. quebecensis Robert. Det. 10; Site 2; August 4-September 1
T. sp. Det. 1; Site 2, 3; July 2-August 25
T. sp. 2 Det. 10; Site 1, 2, 3; May 19-August 8

Family SCAPHIDIIDAE (shining fungus beetles)

Tribe SCAPHISOMINI

Genus **EUBAEOCERA** Cornell
E. sp. Det. 1; Site 2; July 14
E. sp. 2 Det. 1; Site 3; July 7

Family LYCIDAE (net-winged beetles)

Subfamily LYCINAE

Tribe PLATERODINI

Genus **DICTYOPTERUS** Mulsant, 1838
D. aurora (Herbst) Det. 9; Site 1; June 18-25

Tribe CALOPTERINI

Genus **CALOPTERON** Guerin, 1830
C. reticulatum Fabricius. Det. 2; Site 3; July 4

Genus **CELETES** Newman, 1838
C. basalis LeConte. Det. 1; Site 2,3; July 7-August 18

Family LAMPYRIDAE (fireflies)

Subfamily LAMPYRINAE

Tribe PHOTININI

Genus **ELLYCHNIA** LeConte, 1851
E. corrusca (Linnaeus). Det. 2; Site 1, 2, 3; May 19-July 23
E. sp. Det. 2; Site 1, 2, 3; May 19-June 30

Subfamily PHOTURINAE

Genus **PHOTURIS** LeConte, 1851
P. pennsylvanica DeGeer. (woods firefly) Det. 2; Site 3; July 5

Genus **LUCIDOTA** LeConte, 1833
L. atra (Fabricius). Det. 2; Site 3; July 14

Family CANTHARIDAE (soldier beetles)

Subfamily CANTHARINAE

Tribe PODABRINI

Genus **PODABRUS** Westwood, 1840
P. tomentosus Say. Det. 1; Site 2, 3; June 23-September 1

P. rugulosus LeConte. Det. 1; Site 1, 2, 3; June 9-July 14
P. sp. Det. 1; Site 2, 3; May 21-August 6

Tribe CANTHARINI

Genus **CANTHARIS** Linnaeus, 1758
C. sp. Det. 2; Site 3; May 21-August 18
C. sp. 2 Det. 2; Site 1, 2; June 20-August 18

Family CLERIDAE (checkered beetles)

Subfamily CLERINAE

Tribe CLERINI

Genus **ENOCLERUS** Gahan, 1910
E. nigripes (Say) Det. 2; Site 3; May 2-October 26

Tribe PHYLLOBAENINI

Genus **PHYLLOBAENUS** Dejean, 1837
P. sp. Det. 13; October 31, 1994; Site 3; July 21-August 25
P. sp. 2 Det. 13; October 31, 1994; Site 3; June 16-July 14

Family CEPHALOIDAE (false longhorn beetles)

Subfamily CEPHALOINAE

Genus **CEPHALOON** Newman, 1838
C. tenuicorne LeConte. Det. 2 Site 1; June 27-July 25

Family MELOIDAE (blister beetles)

Subfamily MELOINAE

Tribe MELOINI

Genus **MELOE** Linnaeus, 1758
M. niger Kirby. Det. 2; Site 2, 3; May 23-September 29

Family SALPINGIDAE (narrow waisted bark beetles)

Subfamily SALPINGINAE

Tribe SALPINGINI

Genus **RHINOSIMUS** Latreille, 1805
R. viridiaeneus Randall. Det. 1; Site 3; July 1

Family PYROCHROIDAE (fire colored beetles)

Subfamily ISCHALIINAE

Genus **ISCHALIA** Pascoe, 1860
I. costata LeConte. Det. 6; 1994; Site 2, 3; May 19-September 22

Subfamily PYROCHROINAE

Genus **DENDROIDES** Latreille, 1810
D. concolor (Newman). (fire colored beetles) Det. 2; Site 2, 3; June 16-July 14
D. bicolor Det. 2; Site 3; July 30-August 4

Family ELATERIDAE (click beetles)

Subfamily PYROPHINAE

Tribe CONODERINI

Genus **AEALUS** Eschscholtz, 1829
A. mellillus Say. Det. 12; Site 1; August 16

Subfamily ELATERINAE

Tribe AMEPENDINI

Genus **AMPEDUS** Germar, 1844
A. rubricus Say. Det. 12; Site 3; June 30
A. vitiosus LeConte. Det. 12; Site 3; June 23
A. sp. Det. 2; Site 3; June 30

Tribe DENTICOLLINI

Genus **LIMONIUS** Eschscholtz, 1829
L. sp. Det. 12; Site 2; June 9
L. sp. 2 Det. 12; Site 1; June 20

Genus **ATHOUS** Eschscholtz, 1829
A. acanthus Say. Det. 12; Site 2; July 28
A. productus (Randall). Det. 12; Site 1; June 27
A. sp. Det. 12; Site 3; July 28

Genus **HEMICREPIDIUS** Germar, 1839
H. sp. Det. 12; Site 3; July 23

Genus **DENTICOLLIS** Piller and Mitterpacher, 1783
D. denticornis (Kirby). Det. 1; Site 2; June 23

Tribe CTENICERINI

Genus **CTENICERA** Latreille, 1829
C. hieroglyphica (Say). (egyptian click) Det. 12; 1994; Site 2, 3; July 14-September 1
C. resplendens aerarius (Randall). Det. 12; 1994; Site 1; June 9
C. triundulata (Randall). Det. 12; Site 1; August 11
C. pichra (LeConte). Det. 12; Site 2; June 9
C. appressa Randall. (high elevation wet bog species) Det. 9; 1992; Site 1; June 27
C. fulvipes Bland. Det. 12; Site 3; August 11
C. cylindriciformis Herbst. Det. 12; Site 3; May 9-23
C. spinosa LeConte. Det. 12; Site 1, 2; June 16-20
C. sp. (sjaelandica) Müller. Det. 12; Site 3; June 9
C. sp. 2 Det. 12; Site 2; May 23
C. sp. 3 Det. 12; Site 1, 2; June 4-20
C. sp. 4 Det. 12; Site 3; June 11

C. sp. 5 Det. 12; Site 1, 2; June 11-July 2

Genus **EANUS** LeConte, 1862

E. maculipennis LeConte. Det. 12; Site 1; July 14-16

E. decoratus Mannerheim or *estriatus* LeConte Det. 12; Site 1; July 16

Tribe AGRIOTINI

Genus **AGRIOTES** Eschscholtz, 1829

A. collaris LeConte. Det. 12; Site 2, 3; June 16-July 25

Genus **DALOPIUS** Eschscholtz, 1829

D. sp. Det. 12; Site 1; June 18

Tribe ELATERINI

Genus **ELATER** Linnaeus, 1758

E. abruptus Say Det. 12; Site 2, 3; July 28-30

Genus **SERICUS** Eschscholtz, 1829

S. brunneus Linnaeus Det. 12; Site 1, 2, 3; June 16-July 2

Subfamily HYPNOIDINAE

Genus **MARGAIOSTUS** Stibick

M. grandicollis Leconte Det. 12; Site 2, 3; May 9-July 2

Genus **HYPNOIDUS** Dilliagn

H. abbreviatus (Say) Det. 12; Site 1; July 16

Subfamily MELANOTINAE

Genus **MELANOTUS** Eschscholtz, 1829

M. sp. Det. 12; Site 2, 3; June 23-August 21

Family BYTURIDAE (fruitworm beetles)

Genus **BYTURUS** Latreille, 1796

B. unicolor Say. Det. 1; Site 3; May 21-June 11

Family TROGOSITIDAE (bark-gnawing beetles)

Subfamily TROGOSITINAE

Tribe TROGOSITINI

Genus **TENEROIDES** Piller and Mitterpacher, 1783

T. corticalis (Melsheimer). Det. 1; Site 3; May 21

Family NITIDULIDAE (sap feeding beetles)

Subfamily CRTPTARACHINAE

Genus **GLISCHROCHILUS** Reitter, 1873

G. sanguinolentus (Olivier). Det. 2; Site 1, 2, 3; May 12-October 26

G. obtusis (Say). (red-spotted sap beetle) Det. 2; Site 1, 2, 3; May-12 September 15

G. quadrisignatus (Say). Det. 2; Site 3; September 6

G. fasciatus (Olivier). Det. 2; Site 3; June 9

Family CUCUJIDAE (flat bark beetles)

Subfamily CUCUJINAE

Tribe CUCUJINI

Genus **CUCUJUS** Fabricius, 1775

C. clavipes clavipes Fabricius, 1781. (red cucujid) Det. 9; Site 1; September 6

Family LATHRIDIIDAE (minute brown scavenger beetles)

Subfamily LATHRIDIINAE

Genus **LATHRIDUS** Herbst, 1793

L. sp. Det. 1; Site 2, 3; May 14-19

Family COCCINELLIDAE (lady bird beetles)

Subfamily SCYMNINAE

Tribe SCYMNINI

Genus **SCYMNUS** Kugelann, 1794

S. punctatus (Melsheimer). Det. 2; Site 1, 3; May 14-September 1

Subfamily CHILOCORINAE

CHILOCORINI

Genus **CHILOCORUS** Leach, 1817

C. stigma (Say). (twice stabbed ladybeetle) Det. 2; Site 1; June 16

Subfamily COCCINELLINAE

Tribe COCCINELLINI

Genus **ANATIS** Mulsant, 1851

A. labiculata (Say). Det. 2; Site 3; May 12

A. mali (Say). Det. 2; Site 1; June 16

Tribe PSYLLOBORINI

Genus **PSYLLOBORA** Chevrolat, 1842

P. vigintimaculata Say. Det. 1; Site 3; August 11

Family TENEBRIONIDAE (darkling beetles)

Subfamily DIAPERINAE

Tribe BOLITOPHAGINI

Genus **BOLITOTHERUS** Candèze, 1861

B. cornutus (Panzer). (horned fungus beetle) Det. 1; Site 1, 2, 3; June 16-August 1

Subfamily COELOMETOPINAE

Tribe COELOMETOPINI

Genus **UPIS** Fabricius, 1792
U. ceramoides Linnaeus. Det. 2; Site 3; May 14

Subfamily TENEBRIONINAE

Tribe TENEBRIONINI

Genus **ALOBATES** Motschulsky, 1872
A. pennsylvanica (DeGeer). (false mealworm) Det. 2; Site 2; July 5

Family ZOPHERIDAE (ironclad beetles)

Subfamily ZOPHERINAE

Genus **PHELLOPSIS** LeConte, 1862
P. obcordata (Kirby). (ironclad beetle) Det. 1; Site 1, 3; June 16-20

Family MELANDRYIDAE (false darkling beetles)

Subfamily TETRATOMINAE

Tribe TETRATOMINI

Genus **PENTHE** Newman, 1838
P. obliquata (Fabricius). Det. 1; Site 2, 3; June 18-July 23

Subfamily MELANDRYINAE

Tribe SERROPALPINI

Genus **DIRCAEA** Fabricius, 1798
D. sp. Det. 1; Site 2, 3; July 4-August 18

Family SCARABAEIDAE (scarab beetles)

Subfamily APHODIINAE

Tribe APHODIINI

Genus **APHODIUS** Illiger, 1798
A. fimetarius (Linnaeus). Det. 2; Site 2, 3; June 9-July 4
A. ruricola Det. 9; Site 1; June 18-23

Genus **OXYOMUS** Laporte, 1840
O. silvestris (Scopoli 1873). Det. 1; Site 2; July 9

Subfamily GEOTRUPINAE (earth-boring dung beetles)

Tribe GEOTRUPINI

Genus **GEOTRUPES** Latreille, 1796
G. splendidus (Fabricius). Det. 2; Site 1, 3; July 31-September 6

Genus **BOLBOCERAS** Kirby, 1818
B. sp. Det. 2; Site 3; August 18

Subfamily TROGINAE (hide beetles)

Genus **TROX** Fabricius, 1775
T. sp. Det. 2; Site 3; May 5
T. sp. 2 Det. 2; Site 2; May 5

Subfamily MELOLONTHINAE

Tribe SERICINI

Genus **SERICA** MacLeay, 1819
S. sp. Det. 2; Site 3; June 27

Subfamily RUTELINAE (shining leaf chafer)

Tribe RUTELINI

Genus **PELIDNOTA** MacLeay, 1817
P. punctata Linnaeus. (spotted grape beetle) Det. 15; Site 3; July 30

Family LUCANIDAE (stag beetles)

Subfamily PLATYCERINAE

Genus **PLATYCERUS** Geoffroy, 1762
P. quercus Det. 9; Site 2, 3; June 11-16

Subfamily AESALINAE

Genus **CERUCHUS** MacLeay, 1819
C. piceus (Weber). Det. 9; Site 2, 3; June 13-July 18

Family CERAMBYCIDAE (longhorned beetles)

Subfamily LEPTURINAE

Tribe LEPTURINI

Genus **ANTHOPHYLAX** LeConte, 1850
A. cyaneus (Haldeman). Det. 1; Ver. S. Laplante, 1994; Site 2, 3; May 26-June 20

Genus **TYPOCERUS** LeConte, 1850
T. velutinus (Olivier). Det. 9; Ver. S. Laplante, 1994; Site 2; August 19

Genus **XESTOLEPTURA** Casey, 1913
X. tibialis (LeConte). Det. 12; 1994; Site 1; July 30

Genus **TRIGONARTHIS**
T. minnesotana (Casey). Det. 12; 1994; Site 1; September 2

Genus **STICTOLEPTURA**
S. canadensis canadensis (Olivier). Det. 12; 1994; Site 2, 3; August 1-27

Genus **CENTRODERA** LeConte, 1850
C. decolorata Harris. Det. 9; Ver. S. Laplante, 1994; Site 2; June 9

Genus **EVODINUS** LeConte, 1850
E. monticola (Randall). Det. 9; Ver. S. Laplante, 1994; Site 1; June 12-20

Subfamily LAMIINAE
Tribe MONOCHAMINI

Genus **MICROGOES** Casey, 1913
M. oculatus (LeConte). Det. 12; Ver. S. Laplante, 1994; Site 2; July 18

Tribe SAPERDINI

Genus **SAPERDA** Fabricius, 1775
S. candida (Fabricius). (roundheaded apple tree borer) Det. 9; Ver. S. Laplante, 1994; Site 2, 3; July 14-28
S. obliqua Say. (alder borer) Det. 9; Ver. S. Laplante; Site 2; July 31
S. vestita Say. Det. 9; Ver. S. Laplante; Site 3; July 5

Tribe ACANTHOCININI

Genus **AMNISCUS** Haldeman, 1847
A. macula (Say). Det. 12; 1994; Site 3; August 25

Genus **URGLEPTES** Dillon, 1956
U. signatus (LeConte). Det. 12; 1994; Site 3
U. querci (Fitch). Det. 12; 1994; Site 2; September 17

Genus **GRAPHISURUS** Kirby, 1837
G. fasciatus (DeGeer). Det. 12; 1994; Site 3; September 3

Genus **STERNIDIUS** LeConte, 1873
S. fascicularis (Harris). Det. 12; 1994; Site 3; July 9
S. ?misellus (LeConte). Det. 12; 1994; Site 3; August 18

Subfamily CERAMBYCINAE
Tribe ELAPHIDIINI

Genus **ANELAPHUS** Linsley, 1936
A. villosus (Fabricius). Det. 12; 1994; Site 3; May 21

Genus **ELAPHIDION** Serville, 1834
E. mucronatum (Say). Det. 12; 1994; Site 3; August 11

Tribe CLYTINI

Genus **CYRTOPHORUS** LeConte, 1850
C. verrucosus (Olivier). Det. 9; Ver. S. Laplante, 1994; Site 2, 3; May 21-June 27

Genus **CLYTUS** Laicharteg, 1784
C. ruricola (Olivier). Det. 9; Ver. S. Laplante, 1994; Site 2, 3; June 20-July 2

Family CHRYSOMELIDAE (leaf beetles)

Subfamily DONACIINAE (longhorn leaf beetles)
Tribe PLATEUMARINI

Genus **PLATEUMARIS** Thomson, 1866
P. rufa Say, 1826. Det. 9; Site 2; May 21

Subfamily SYNETINAE

Genus **SYNETA** Dejean, 1837
S. ferruginea (Germar). Det. 1; Site 1, 2; May 19-July 18

Tribe LUPERINI
Subtribe DIABROTICINA

Genus **DIABROTICA** Chevrolat, 1843
D. longicornis barberi (Say). (northern corn rootworm) Det. 2; Site 1; September 1

Subfamily HISPINAE
Tribe PHYSONOTINI

Genus **OEDIONYCHIS** Berthold, 1827
O. subvittata Det. 6; 1991; Site 3; May 19-July 28

Family CURCULIONIDAE (weevils)

Subfamily ANTHONOMINAE
Tribe ANTHONOMINI

Genus **ANTHONOMUS** Germar, 1817
A. quadrigibbosus (Say). (apple curculio) Site 2; May 21

Subfamily RHYNCHOPORINAE
Tribe SPHENOPHORINI

Genus **SPHENOPHORUS** Schoenherr, 1838
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