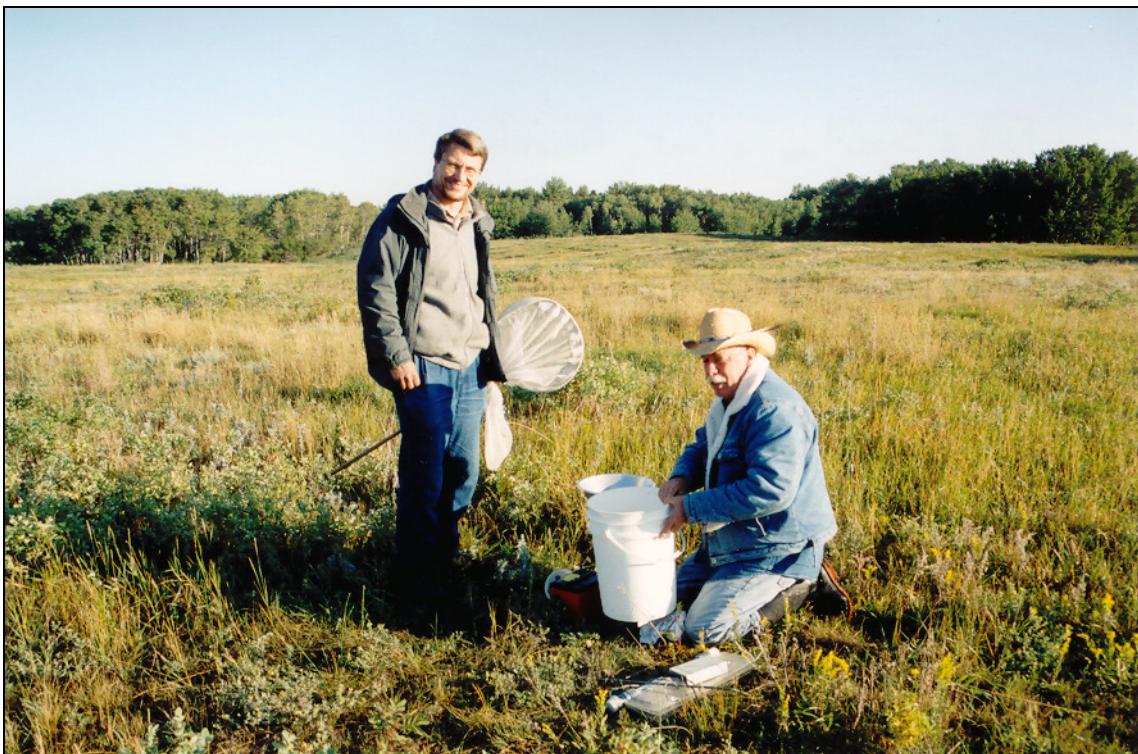


# MOTHS OF THE BUFFALO LAKE MORaine CONSERVATION AREA, 2001-2011

Charles Durham Bird  
Box 22, Erskine, AB, T0C 1G0, [cbird@xplornet.com](mailto:cbird@xplornet.com)  
8 March 2012

No new collections were made in the area in 2011. The present report is essentially an update that includes a number of redeterminations and additions to the information in last year's report. It also follows the up-to-date order and taxonomy of Pohl et al. (2010), rather than that of Hedges et al. (1983).



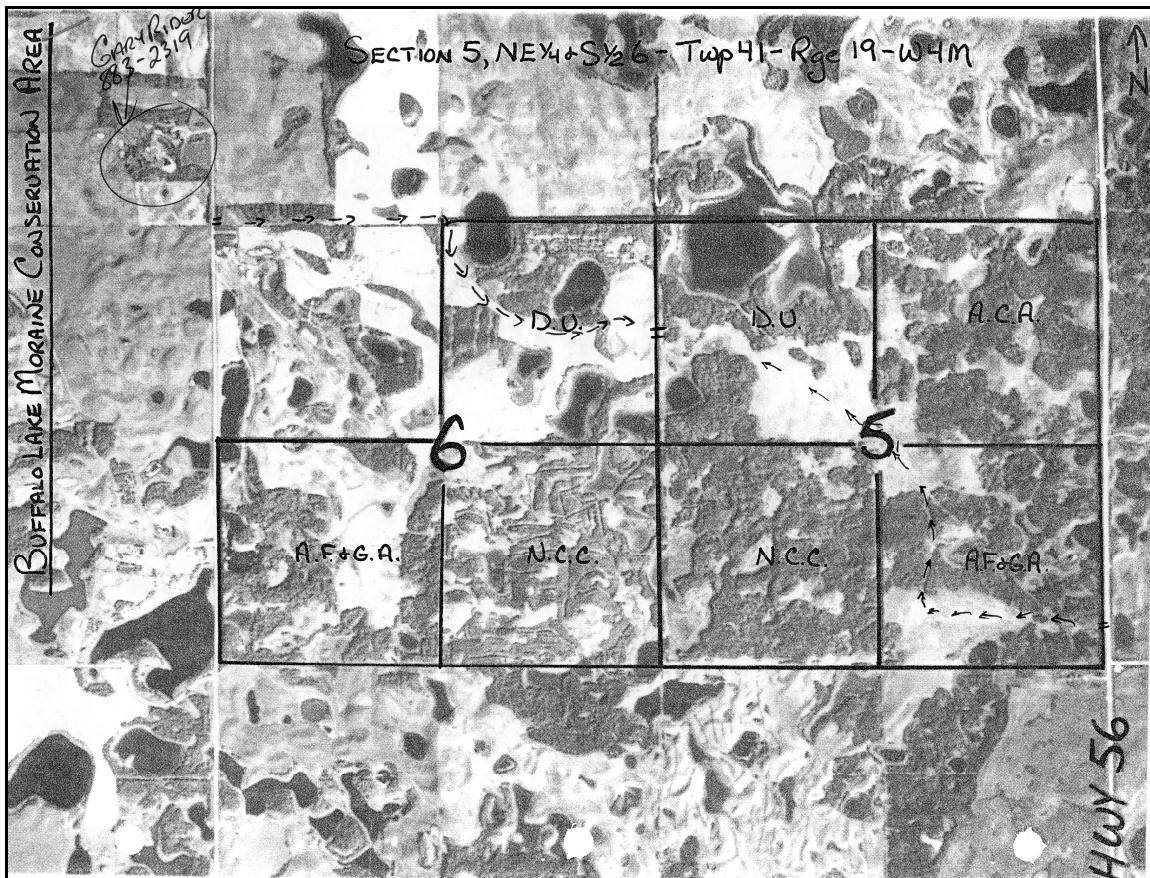
Felix Sperling and Gary Anweiler, Alberta Lepidopterist's Guild members, in the Buffalo Lake Conservation Area, August 18, 2002

## THE AREA

The Buffalo Lake Moraine Conservation Area is made up of contiguous quarters of land, located 18 km north of Stettler, in south-central Alberta. Known originally as the Caine property, the quarters were variously purchased by The Alberta Conservation Association, The Alberta Fish and Game Association, Ducks Unlimited Canada and The Nature Conservancy of Canada in June 1999. Additional quarters have been purchased since then.

Ecologically, the area is made up of rolling, morainal aspen parkland. There is evidence that some areas were cultivated well over 50 years ago, but since that time, the land has been used for grazing cattle. A grazing inventory study was carried out by Mancroft-EBA Consultants

Ltd. (1998). A detailed vegetation and range resource inventory was carried out in 2005 (Rangeland Conservation Service Limited, 2006). No grazing was allowed in 1999. In 2000 the area was divided into 3 grazing paddocks. Since 2000 limited grazing has been allowed with one of the quarters/paddocks being idled each year.



Aerial photo of the Buffalo Lake Moraine Conservation Area taken around the year 2000. Since then, additional quarters have been added. Most of the research reported herein was carried out in Section 5. The arrows indicate an access trail.

## **BACKGROUND**

Provincial Parks and other areas where natural vegetation is protected are of great value as the flora and fauna present in them is typical of what was in Alberta before widespread agricultural activities replaced them with flora and fauna that was reduced in numbers and made up of species that were associated with cultivated grains and hay crops. As a result, many of Alberta's "rare and endangered" species are now found only, or mainly, in such protected areas.

The writer, now retired and living in Erskine, Alberta, has long been interested in the natural flora and fauna of the province. He is a member of the Alberta Lepidopterist's Guild, the purpose of which is to encourage study of Alberta's moths and butterflies. In the spring of 2000, he commenced an examination of the moths of south-central Alberta, the purpose of which was to document the species present in various natural areas. He became acquainted with The Buffalo Lake Conservation Area in 1999, when it was still in private hands. This led to the

procurement, with help from Grant Nieman, of a Letter of Authority to collect in the Area in 2001, the purpose of which was to produce the present baseline list. Andy Murphy was helpful in providing Letters of Authority in later years. Details and dates of collecting activities are in the Appendix.



A UV moth trap set up in an aspen stand on June 4, 2004 in the Buffalo Lake study area.



A moth trap in prairie grassland with silver willow nearby and aspen in the background; Buffalo Lake Conservation Area, 4 Jun 2004.

There is still much to be learned about the distribution and status of lepidopteran (moth and butterfly) species in south-central Alberta. Baseline studies of this sort provide information that helps characterize the species associated with various ecoregions, in the present case Aspen Parkland; determine the status designations (abundant, common, rare, endangered) of various species; show the effects of grazing on species composition and abundance; and allow the examination of many other parameters, including phenology, dry vs. wet years, and outbreaks of various species such as forest tent caterpillar.

### **SPECIMEN DISPOSITION**

All specimens collected by the writer presently reside in his collection but most will eventually go to the University of Alberta Strickland Museum (UASM), and some will be deposited in the Canadian National Collection (CNC) in Ottawa and the Northern Forest Research Centre (NFRC) in Edmonton. All specimens have been databased and the information on verified material can be viewed at <http://www.entomology.ualberta.ca/searching.php>.

### **CHECKLIST**

Pohl et al (2010) have put together an up-to-date annotated list of the Lepidoptera of Alberta. They include 2367 species, many more than those mentioned by Bowman (1951). This

list incorporates recent changes in taxonomy of all groups according to various literature sources, including those listed for the Noctuoidea by Lafontaine & Schmidt (2010). In previous reports, the order and terminology, were that of the "Check List of the Lepidoptera of America North of Mexico" (1983) edited by R.W. Hedges. The species order and taxonomy in this report is that of Pohl et al (2010) followed by that in Hedges (1983). Common names are mentioned in those cases where such names are known.

Except for a few made by Ernest Mengersen and Gary Anweiler, all collections were made by the writer. While most of the larger or macromoths are relatively well known, the same cannot be said for some of the smaller or micromoths. Identifications, especially of the latter, can be difficult or are at present impossible, until such time as revisionary studies are made. This is especially true in the family Gelechiidae. Also, genitalic dissection and examination is necessary for positive identification in some groups. For these reasons, some of the determinations should be regarded as tentative. The scientific names of the species are followed by the date-month-year of the collection and the number of individuals mounted; EM indicates a collection made by Ernest Mengersen; and an "SR" indicates a sight record. Common names are added if such are known to exist.

Kenneth Bowman's (1951) list of the Lepidoptera of Alberta presents all species known at that time and gives the distribution of each according to 21 Areas. His areas 5, 8 and 10 essentially cover all of south-central Alberta, with the study area being in Area 8. Most of Bowman's records are from Area 10, which includes Edmonton, so most of the species found in the following list would be additions to his Area 8.

### **ACANTHOPTEROCTETIDAE – Archaic Sun Moths**

2. *Acanthopteroctetes bimaculata* Davis (6. *Acanthopteroctetes bimaculata* Davis) – 20A-V-2005

1. This is the second discovery of this rare species in Alberta, the first having been made by G. Pohl in old aspen forest near Lac La Biche. The present collection was made in a buckbrush/aspen/saskatoon community. Further details and the following photograph of this primitive moth can be found in Pohl & Bird (2005).



*Acanthopteroctetes bimaculata*, wingspan 11 mm; ALBERTA, Buffalo Lake, 20-V-2005, leg. C.D. Bird, BIRD9534, C.D. Bird image

### **HEPIALIDAE – Ghost Moths and Swifts**

5. *Gazoryctra novigannus* (B. & Benj.) (29. *Gazoryctra novigannus* (B. & Benj.)) – 22-VIII-2001 3, 30-VIII-2001 1, 12-IX-2001 2, 17-IX-2001 1, 24-IX-2001 1, 9A-IX-2002 1, 9B-IX-2002 1 and 30-VIII-2004 1.
8. *Sthenopsis purpurascens* (Pack.) (19. *Sthenopsis purpurascens* (Pack.)) (Large Ghost Moth) – 15-VII-2001 5, 25-VII-2004 1.

### **TINEIDAE – Fungus Moths**

#### **Tineidae, Tineinae**

44. *Tinea irrepta* Braun (399. *Tinea irrepta* Braun) – 31-V-2001 1, 22-VI-2001 1, 5-VII-2001 1, 22-VIII-2001 1, 23-VI-2002 2, 17-VIII-2002 2, 9A-IX-2002 2, 9B-IX-2002 1, 12B-VI-2003 1, 29B-VI-2003 1, 10B-VII-2003 2, 20A-VII-2003 1, 20B-VII-2003 1, 27A-VII-2003 1, 27B-VII-2003 1, 30A-VIII-2003 1, 30B-VIII-2003 1, 4-VI-2004 2, 25-VII-2004 2, 19A-VI-2005 2, 19B-VI-2005 3, 24C-VI-2006 1, 13B-VII-2006 1, 3A-VIII-2006 1, 26B-VI-2007 1 and 26D-VI-2007 1.
49. *Monopis laevigella* (D. & S.) (Not in Hodges) – 4-VI-2004 1.
51. *Monopis spilotella* Teng. (421. *Monopis spilotella* Tengström) – 25-VII-2004 1, 13A-VII-2006 2 and 26B-VI-2007 1.

### **ACROLOPHIDAE – Tube Moths**

54. *Amydria effrentella* Clem. (334. *Amydria effrentella* Clem.) – 25-VII-2004 3.

### **GRACILARIIDAE – Gracillariid Moths**

#### **Gracillariidae, Gracillariinae**

66. *Caloptilia alnivorella* (Cham.) (587. *Caloptilia alnivorella* (Cham.)) (Alder Leafminer) – 24B-VI-2006 1.
76. *Caloptilia stigmatella* (F.) (639. *Caloptilia stigmatella* (F.)) – 29-V-2002 1.
82. *Parornix conspicuella* (Dietz) (669. *Parornix conspicuella* (Dietz)) – 4-VI-2004 1.
83. *Acrocercops astericola* (F. & B.) (692. *Acrocercops astericola* (F. & B.)) – 24B-VI-2006 1 and 24C-VI-2006 1.
85. *Phyllonorycter prob apparella* (H.-S.) (798. *Phyllonorycter prob apparella* (H.-S.)) (Aspen Leaf Miner) – 28-IV-2001 1.

### **YPONOMEUTIDAE – Ermine and Needleminer Moths**

#### **Yponomeutidae, Argyresthiinae – Argyresthiid Moths**



101. *Argyresthia oreasella* (Clem.) (2467. *Argyresthia oreasella* (Clem.)) (Cherry Shoot Borer) – 15-VII-2001 1 and 22-VIII-2001 3.

### **YPSOLOPHIDAE – Falcate-winged Moths**

#### **Ypsolophidae, Ypsolophinae**

104. *Ypsolopha canariella* (Wlsm.) (2371. *Ypsolopha canariella* (Wlsm.)) – 15-VII-2001 2, 22-VIII-2001 1, 30-VIII-2001 1, 17-VIII-2002 2, 9A-IX-2002 1, 8A-VIII-2003 1, 30A-VIII-2003 1, 30B-VIII-2003 1, 25-VII-2004 1, 30-VIII-2004 3 and 3C-VIII-2006 1.  
 106. *Ypsolopha dentiferella* (Wlsm.) (2376. *Ypsolopha dentiferella* (Wlsm.)) – 4-VII-2001 2, 27-VII-2002 1, 27A-VII-2003 1, 13B-VII-2006 1, 3A-VIII-2006 1, 25B-VII-2007 1, 10A-VIII-2008 1, 10B-VIII-2008 1 and 10C-VIII-2008 1.  
 108. *Ypsolopha falciferella* (Wlsm.) (2380. *Ypsolopha falciferella* (Wlsm.)) – 7-V-2001 1, 10-V-2002 1 and 13B-VI-2009 1.

### **PLUTELLIDAE – Plutellid Moths**

114. *Plutella xylostella* (L.) (2366. *Plutella xylostella* (L.)) (Diamondback Moth) – 15-VII-2001 1, 4-VIII-2001 1, 22-VIII-2001 1, 17-IX-2001 1, 24-IX-2001 1, 19-V-2002 1, 27A-VII-2003 1, 27B-VII-2003 1, 8A-VIII-2003 1, 30A-VIII-2003 1+8 SR, 30B-VIII-2003 1 SR, 20A-V-2005 1, 19B-VI-2005 1, 3A-VIII-2006 1, 25A-VII-2007 1 and 10B-VIII-2008 1.

### **ELACHISTIDAE – Concealer Moths**

#### **Elachistidae, Depressariinae**

134. *Agonopterix rosaciliella* (Bsk.) (876. *Agonopterix rosaciliella* (Bsk.)) – 23C-V-2009 1.  
 135. *Agonopterix canadensis* (Bsk.) (878. *Agonopterix canadensis* (Bsk.)) (Canadian Agonopterix Moth) – 10-V-2002 2 and 3A-VIII-2006 1.  
 138. *Agonopterix argillacea* (Wlsm.) (889. *Agonopterix argillacea* (Wlsm.)) – 28-IV-2001 5, 19-V-2002 1 and 9A-IX-2002 1.  
 143. *Depressariodes ciniflonella* Lienig & Zell. (908. *Depressariodes ciniflonella* Leinig & Zell.) – 25-IV-2001 1, 28-IV-2001 1, 31-V-2001 1, 22-VIII-2001 1, 17-IX-2001 1, 10-V-2002 1, 17-VIII-2002 1 and 9A-IX-2002 1.

144. *Depressariodes fulva* (Wlsm.) (910. *Martyrhilda fulva* (Wlsm.)) – 31-V-2001 1, 7-VI-2001 1, 22-VI-2001 1, 4-VIII-2001 5, 17-VIII-2002 9, 20B-VII-2003 1, 27A-VII-2003 3, 27B-VII-2003 1, 8A-VIII-2003 3, 8B-VIII-2003 1, 19A-VI-2002 1, 19B-VI-2005 2, 3A-VIII-2006 1 and 16B-VIII-2006 1.
146. *Semioscopis packardella* (Clem.) (912. *Semioscopis packardella* (Clem.)) – 4-VI-2004 1, 13A-V-2006 1, 16B-V-2006 1, 23B-V-2009 1 and 23C-V-2009 1.
148. *Semioscopis inornata* (Wlsm.) (914. *Semioscopis inornata* (Wlsm.)) – 25-IV-2001 1 and 28-IV-2001 1.
149. *Semioscopis megamicrella* Dyar (915. *Semioscopis megamicrella* Dyar) – 25-IV-2001 1, 28-IV-2001 2 and 10-V-2002 1.
150. *Semioscopis aurorella* Dyar (916. *Semioscopis aurorella* Dyar) – 25-IV-2001 1 and 23B-V-2009 1.
151. *Depressaria atrostrigella* Clarke (918. *Depressaria atrostrigella* Clarke) – 17-IX-2001 1, 24-IX-2001 1 and 13A-VII-2006 1.
155. *Depressaria alienella* Bsk. (926. *Depressaria alienella* Bsk.) – 22-VIII-2001 2.

#### **Elachistidae, Elachistinae**

*Elachista* spp. (*Elachista* spp.) – 23-VI-2002 1, 24C-VI-2006 1 and 19C-VI-2008 1.

#### **XYLORYCTIDAE – Teardrop Moths**

##### **Xyloryctidae, Scythridinae**

Species indet. – 28-IV-2001 1, 4-VI-2004 2.

186. *Scythris mixaula* (Meyr.) (1665. *Scythris mixaula* (Meyr.)) – 30B-VIII-2003 1. Identified by J.-F. Landry on 3 Feb 2004, this, and a specimen collected at Tolman Bridge on 16 September 2000 by Ernest Mengersen, were the first records for Alberta and for Canada (Pohl et al 2005). The specimen is now in the Canadian National Collection of Insects (CNCI). The larvae of this species apparently feed on cactus. Oddly, no cacti have yet been found in the Buffalo Lake Moraine study area.

#### **GLYPHIDOCERIDAE – Glyphidocerid Moths**

189. *Glyphidocera hurlberti* Adamski (Not in Hodges) – 22-VI-2001 1, 27A-VII-2003 3, 20A-V-2005 1, 19B-VI-2005 1 and 24C-V-2006 1. Described by Adamski (2000).

#### **OECOPHORIDAE – Oecophorid Moths**

##### **Oecophoridae, Oecophorinae, Oecophorini**

193. *Polix coloradella* (Wlsm.) (1058. *Polix coloradella* (Wlsm.)) (The Skunk Moth) – 15-VII-2001 1.

#### **BATRACHEDRIDAE – Batrachedrid Moths**

##### **Batrachedridae, Batrachedrinae**

196. *Batrachedra paeangustata* (Haw.) (1399. *Batrachedra paeangustata* (Haw.)) – 4-VIII-2001 1 and 22-VIII-2001 1.

### **COLEOPHORIDAE – Coleophorid Moths**

#### **Coleophoridae, Blastobasinae**

*Hypatopa* prob. n. sp. – 4-VIII-2001 1, 22-VIII-2001 4, 30-VIII-2001 1, 12-IX-2001 1, 9A-IX-2002 11 and 16B-VIII-2006 1. Dr. David Adamski, who is monographing the family for the Moths of North America series feels, that material called *Holcocera immaculella* McD. in previous reports, probably belong to an undescribed species of *Hypatopa*.

#### **Coleophoridae, Coleophorinae – Casebearer Moths**

*Coleophora* spp. (*Coleophora* spp.) – 15-VII-2001 4, 4-VIII-2001 2, 22-VIII-2001 1, 17-VIII-2002 1, 20B-VII-2003 1, 27A-VII-2003 1, 27B-VII-2003 1, 8B-VIII-2003 1, 25-VII-2004 1, 24B-VI-2006 1, 13A-VII-2006 1, 3A-VIII-2006 1, 3C-VIII-2006 1, 10A-VIII-2008 1, 10B-VIII-2008 1 and 12A-VI-2009 1. The above specimens are currently with Dr. J.-F. Landry who is doing a North American monograph of the group. Some of the JFL entities mentioned below may be of undescribed species. Dr. Landry is thanked for the the following identifications.

- 198. *Coleophora rosaefoliella* Clem. (1262. *Coleophora rosaefoliella* Clem.) – 4-VI-2004 1.
- 200.1. *Coleophora cretaticostella* Clem. (1283. *Coleophora cretaticostella* Clem.) – 7-VI-2001 1.  
Reported as new for Alberta in Pohl et al 2011.
- 208. *Coleophora rosacella* Clem. (1316. *Coleophora rosacella* Clem.) – 5-VII-2001 1, 15-VII-2001 1 and 26B-VI-2007 1.
- 209. *Coleophora mcdunnoughiella* Oud. (1321. *Coleophora mcdunnoughiella* Oudejans) – 26B-VI-2007 1.
- 209.1. *Coleophora sparsipuncta* Heinr. (1323. *Coleophora sparsipuncta* Heinr.) – 27-VII-2002 1 and 8A-VIII-2003 1. Reported as new for Alberta in Pohl et al 2011.
- 210.1. *Coleophora seminella* McD. (1325. *Coleophora seminella* McD.) – 15-VII-2001 1. Reported as new for Alberta in Pohl et al 2011.
- 214. *Coleophora sparsipulvella* Cham. (1352. *Coleophora sparsipulvella* Cham.) – 17-VIII-2002 1 and 17A-VII-2003 1.  
Not in Pohl et al. (1359. *Coleophora cervinella* McD.) – 15-VII-2001 1.
- 216. *Coleophora brunneipennis* Braun (1367. *Coleophora brunneipennis* Braun) – 29B-VI-2003 2.
- 219. *Coleophora glaucicolella* Wood (1378. *Coleophora glaucicolella* Wood) – 23-VI-2002 1 and 24B-VI-2006 1.
- 222. *Coleophora trifolii* (Curt.) (1388. *Coleophora trifolii* (Curt.)) (Large Clover Case-bearer) – 15-VII-2001 1, 20A-VII-2003 1, 20B-VII-2003 1, 25-VII-2004 2, 13B-VII-2006 1, 26B-VI-2007 2 and 26D-VI-2007 1.  
*Coleophora* JFL002 – 15-VII-2001 4, 27-VII-2002 2 and 13B-VII-2006 1.  
*Coleophora* JFL049 – 20A-V-2005 1.  
*Coleophora* JFL051 – 15-VII-2001 1.  
*Coleophora* JFL080 – 23-VI-2002 1.  
*Coleophora* JFL084 – 8-VIII-2002 1 and 25-VII-2004 1.  
*Coleophora* JFL092 – 17-VII-2001 1 and 17-VIII-2002 1.

### **Coleophoridae, Momphinae**

224. *Mompha albapalpella* (Cham.) (1423. *Mompha albapalpella* (Cham.)) – 21A-VII-2007 1.  
 229. *Mompha unifasciella* (Cham.) (1458. *Mompha unifasciella* (Cham.)) – 23-VI-2002 1.  
 230. *Mompha idaei* (Zell.) (1457. *Mompha tricristatella* (Cham.)) – 25B-VII-2007 1.

### **COSMOPTERYGIDAE – Cosmopterygid Moths**

#### **Cosmopterygidae, Cosmopteryginae**

241. *Limnaecia phragmitella* Staint. (1515. *Limnaecia phragmitella* Staint.) (Shy Cosmet Moth) – 15-VII-2001 1, 4-VII-2001 5, 12-VIII-2001 1 and 27A-VII-2003 1.

### **GELECHIIDAE – Gelechiid Moths**

Species indet. – 25-IV-2001 4, 22-VI-2001 2, 15-VII-2001 18, 4-VIII-2001 1, 22-VIII-2001 3, 10-V-2002 1, 19-V-2002 3, 23-VI-2002 5, 27-VII-2002 6, 4-VIII-2002 1, 27A-VII-2003 1, 17-VIII-2002 3, 9A-IX-2002 2, 20A-VII-2003 1, 4-VI-2004 5, 25-VII-2004 9, 30-VIII-2004 9, 20A-V-2005 1, 19-VI-2005 1 (?*Syncopacma* sp.), 24A-V-2006 2, 24C-V-2006 2, 24C-VI-2006 5, 13A-VII-2006 2, 13B-VII-2006 2, 3C-VIII-2006 1, 16B-VIII-2006 1, 26B-VI-2007 2, 26D-VI-2007 1, 25B-VII-2007 1, 19A-VI-2008 1, 19B-VI-2008 2, 12A-VI-2009 1 and 12C-VI-2009 1. Little is known about many of the species in this family and it may be many years before some of these specimens are determined or described.

#### **Gelechiidae, Gelechiinae, Anomologini**

248. *Aristotelia devexella* Braun (1734. *Aristotelia devexella* Braun) – 27-VII-2002 1, 20A-VII-2003 1, 20B-VII-2003 1, 27A-VII-2003 2, 27B-VII-2003 1, 8A-VIII-2003 4, 30A-VIII-2003 1, 30-VIII-2004 1 and 3A-VIII-2006 1.

#### **Gelechiidae, Gelechiinae, Litini**

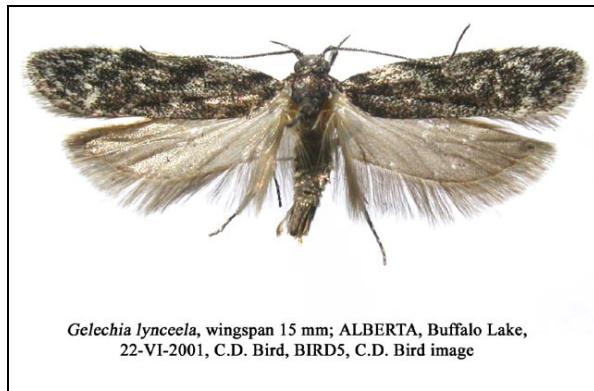
256. *Coleotechnites blastovora* McLeod (1796. *Coleotechnites blastovora* McLeod) – 25-IV-2001 1, 28-IV-2001 1, 7-V-2001 1, 15-V-2001 1, 19-V-2002 1, 20A-V-2005 1, 23B-V-2009 1, 23C-V-2009 1 and 12B-VI-2009 1.

*Xenolechia* sp. – 15-VII-2001 1.

267. *Xenolechia velatella* (Bsk.) (1880. *Xenolechia velatella* (Bsk.)) – 7-V-2001 1.

#### **Gelechiidae, Gelechiinae, Gelechiini**

271. *Prolita variabilis* (Bsk.) (1902. *Lita variabilis* (Bsk.)) – 30-VIII-2004 3.



282. *Gelechia lynceela* Zell. (1946. *Gelechia lynceela* Zell.) – 22-VI-2001 2, 15-VII-2001 2, 24B-VI-2006 3 and 26B-VI-2007 1.

#### Gelechiidae, Gelechiinae, Gelechiini

*Chionodes* spp. – 22-VI-2001 1 and 5-VII-2001 1.

292. *Chionodes mediofuscella* (Clem.) (2093. *Chionodes mediofuscella* (Clem.)) – 22-V-2001 2, 12B-VI-2003 1, 4-VI-2004 1, 18-VI-2004 1, 20A-V-2005 1, 24A-V-2006 1, 24B-V-2006 2, 24C-V-2006 4 and 12A-VI-2009 1.  
 293. *Chionodes terminimaculella* (Kft.) (2117. *Chionodes terminimaculella* (Kft.)) – 15-V-2001 1, 31-V-2001 1, 23-VI-2002 1, 9A-IX-2002 1, 4-VI-2004 2. 24A-V-2006 1 and 24C-V-2006 1.  
 300. *Chionodes psiloptera* (B. & Bsk.) (2111. *Chionodes psilopterus* (B. & Bsk.)) – 5-VII-2001 2, 15-VII-2001 2, 23-VI-2002 1, 10B-VII-2003 2, 20B-VII-2003 1, 4-VI-2004 3, 18-VI-2004 2, 25-VII-2004 3, 13A-VII-2006 4, 13B-VII-2006 1 and 10A-VIII-2008 3.  
 307. *Chionodes viduella* (F.) (2123. *Chionodes viduella* (F.)) – 15-VII-2001 2 and 4-VIII-2001 1.  
 317. *Filatima abactella* (Clarke) (2127. *Filatima abactella* (Clarke)) – 15-V-2001 1, 31-V-2001 1, 29-V-2002 1, 23-VI-2002 1, 29B-VI-2003 1, 4-VI-2004 2, 20A-V-2005 1, 26A-V-2005 1, 24A-V-2006 3, 24C-V-2006 2, 24B-VI-2006 1, 26B-VI-2007 1, 29-V-2008 2, 19B-VI-2008 1, 23B-V-2009 1, 23C-V-2009 1, 12B-VI-2009 1, 4B-VI-2010 1 and 4C-VI-2010 1.

#### Gelechiidae, Gelechiinae, Gnorimoschemini

The Alberta members of this group are presently being studied by Vazrick Nazari. A number of new species will be described.

*Gnorimoschema* sp. – 16B-VIII-2006 2.

328. *Gnorimoscema gallaeasterella* (Kell.) (1985. *Gnorimoscema gallaeasterella* (Kellicott)) – 9A-IX-2002 1.  
 329. *Gnorimoscema galaesolidaginis* (Riley) (1986. *Gnorimoscema galaesolidaginis* (Riley)) (Golden Elliptical-gall Moth) – 16A-VIII-2006 1.  
 332. *Gnorimoscema septentrionella* Fyles (2000. *Gnorimoscema septentrionella* Fyles) – 30-VIII-2004 3.  
 344. *Caryocolum casella* (Wlk.) (2040. *Caryocolum casella* (Wlk.)) – 17-IX-2001 2.

#### Gelechiidae, Gelechiinae, Anacampsini

351. *Anacampsis niveopulvella* (Cham.) (2243. *Anacampsis niveopulvella* (Cham.)) – 4-VIII-2001 2.

#### **Gelechiidae, Dichomeridinae**

354. *Helcystogramma fernaldella* (Bsk.) (2267. *Brachmia fernaldella* (Bsk.)) – 27-VII-2002 1, 4-VI-2004 2, 20A-V-2005 2, 24A-V-2006 1, 23A-V-2009 1, 23C-V-2009 1 and 12A-VI-2009 1.  
 358. *Dichomeris purpureofusca* (Wlsm.) (2308. *Dichomeris purpureofusca* (Wlsm.)) – 12B-VI-2003 1.

### **TORTRICIDAE – Tortricid Moths**

#### **Tortricidae, Tortricinae, Tortricini**

The large genus *Acleris* is in need of a thorough revision. Genitalic examination is needed in many cases for reasonably positive identification.

403. *Acleris albicomana* (Clem.) (3502. *Croesia albicomana* (Clem.)) – 15-VII-2001 2, 4-VIII-2001 1, 20A-VII-2003 1, 25-VII-2004 1, 13A-VII-2006 1, 13B-VII-2006 1 and 10C-VIII-2008 1.  
 405. *Acleris macdunnoughi* Obr. (3506. *Acleris macdunnoughi* Obr.) – 23B-V-2009 3.  
 414. *Acleris coronana* (McD.) or 411 *Acleris fuscana* (B. & Bsk.) (3523. *Acleris coronana* (McD.) or 3520 *Acleris fuscana* (B. & Bsk.)) – 24-V-2006 1. Revised by Jason Dombroskie from *Acleris forbesana*.  
 415. *Acleris forbesana* (McD.) (3525. *Acleris forbesana* (McD.)) – 24C-V-2006 2.  
 416. *Acleris schalleriana* ? (L.) (3527. *Acleris schalleriana* ? (L.)) – 17-IX-2001 2. Revised by Jason Dombroskie from *Acleris macdunnoughi*.  
 417. *Acleris oxycoccana* (Pack.) (3529. *Acleris oxycoccana* (Pack.)) – 17-IX-2001 14 and 24-IX-2001 3.  
 422. *Acleris robinsoniana* (Fbs.) (3536. *Acleris robinsoniana* (Fbs.)) – 22-VIII-2001 2, 30-VIII-2001 2, 17-VIII-2002 1, 3A-VIII-2006 1, 16B-VIII-2006 1, 10C-VIII-2008 1, 23A-V-2009 1 and 23B-V-2009 1.  
 433. *Acleris inana* Rob. (3551. *Acleris inana* Rob.) – 27-VIII-2006 1. Determined by Jason Dombroskie.  
 434. *Acleris scabrana* (D. & S.) (3552. *Acleris scabrana* (D. & S.)) – 23C-V-2009 1.  
 435. *Acleris bowmanana* (McD.) (3553. *Acleris bowmanana* (McD.)) – 24-IX-2001 1.  
 436. *Acleris nigrolinea* (Rob.) (3556. *Acleris nigrolinea* (Rob.)) – 28-IV-2001 1, 15-V-2001 1 and 10-V-2002 2.

#### **Tortricidae, Tortricinae, Cochylini**

Further information on Canadian Cochylids can be found in Razowski (1997). Some of the following specimens are now being studied by Eric Metzler and John Brown as part of a major look at the family members. This may result in a number of new species.

Species indet. – 30-VIII-2001 1.

443. *Phteochora fulviplicana* (Wlsm.) (3792. *Hysterosia fulviplicana* (Wlsm.)) – 5-VII-2000 1, 15-VII-2001 1?, 10B-VII-2003 1, 13A-VII-2006 1, 13B-VII-2006 1, 24C-VI-2006 1, 13A-VII-2006 1 and 3B-VIII-2006 1.  
 446. *Phteochora vitellinana* (Zell.) (3787. *Carolella vitellinana* (Zell.)) – 22-VI-2001 1 and 24B-VI-2006 1.

448. *Phtheochroa waracana* (Kft.) (3796. *Hysterosia waracana* Kft. – 15-VII-2001 1 and 27B-VII-2003 1.
460. *Aethes smethmanniana* (F.) (3755. *Aethes smethmanniana* (F.)) – 5-VII-2001 1 and 26B-VI-2007 1.

### **Tortricidae, Tortricinae, Cnephasini**

466. *Eana argentana* (Cl.) (3568. *Eana argentana* (Cl.)) – 22-VI-2001 3, 5-VII-2001 1, 29A-VI-2003 1, 29B-VI-2003 1 and 10B-VII-2003 1.
469. *Decodes horariana* (Wlsm.) (3580. *Decodes hororianus* (Wlsm.)) – 17-IX-2001 12 and 24-IX-2001 2.

### **Tortricidae, Tortricinae, Archipini**

472. *Pandemis canadana* Kft. (3595. *Pandemis canadana* Kft.) (Green Aspen Leafroller) – 5-VII-2001 1, 15-VII-2001 1 and 4-VIII-2001 1, 13A-VII-2006 1, 3A-VIII-2006 1, 3B-VIII-2006 13C-VIII-2006 1, 16C-VIII-2006 1, 25A-VII-2007 1, 10A-VIII-2008 1, 10B-VIII-2008 1 and 10C-VIII-2008 1.
475. *Argyrotaenia repartana* Free. (3601. *Argyrotaenia repartana* Free.) – 23A-V-2009 1, 23B-V-2009 1, 23C-V-2009 1 and 12B-VI-2009 1.
479. *Argyrotaenia quadrifasciana* (Fern.) (3621. *Argyrotaenia quadrifasciana* (Fern.)) (Lesser All-green Leafroller Moth) – 10B-VIII-2008 1.
480. *Argyrotaenia mariana* (Fern.) (3625. *Argyrotaenia mariana* (Fern.)) – 20A-V-2005 1.
483. *Choristoneura rosaceana* (Harr.) (3635. *Choristoneura rosaceana* (Harr.)) – 15-VII-2001 1, 4-VIII-2001 1, 24A-VI-2006 1 and 13A-VII-2006 2.
485. *Choristoneura conflictana* (Wlk.) (3637. *Choristoneura conflictana* (Wlk.)) (Large Aspen Tortrix) – 5-VII-2001 2, 23-VI-2002 100 SR, 29B-VI-2003 1 and 25-VII-2004 1. This can occur in outbreak numbers (Prentice 1955).
486. *Choristoneura fumiferana* (Clem.) (3638. *Choristoneura fumiferana* (Clem.)) (Spruce Budworm Moth) – 10A-VIII-2008 1 and 10B-VIII-2008 1.
495. *Archips argyrospila* (Wlk.) (3648. *Archips argyrospila* (Wlk.)) (Fruit Tree Leafroller Moth) – 25-VII-2004 3.
498. *Archips cerasivorana* (Firch) (3661. *Archips cerasivorana* (Fitch)) (Ugly Nest Caterpillar Moth) – 10A-VIII-2008 1, 10B-VIII-2008 1 and 10C-VIII-2008 1.
502. *Syndemis afflictana* (Wlk.) (3672. *Syndemis afflictana* (Wlk.)) (Gray Leafroller or Black-and-gray Banded Leafroller Moth) – 24A-V-2006 1.
504. *Aphelia alleniana* (Fern.) (3675. *Aphelia alleniana* (Fern.)) – 15-VII-2001 1, 27-VII-2002 1, 29A-VI-2003 2, 29B-VI-2003 1, 10B-VII-2003 1, 24B-VI-2006 1, 24C-VI-2006 1, 26B-VI-2007 1, 26C-VI-2007 1 and 26D-VI-2007 1.
508. *Clepsis persicana* (Fitch) (3682. *Clepsis persicana* (Fitch)) (White-triangle Tortrix Moth) – 24A-VI-2006 1, 24B-VI-2006 1, 13A-VII-2006 1 and 26D-VI-2007 1.
509. *Clepsis clemensiana* (Fern.) (3684. *Clepsis clemensiana* (Fern.)) (Clemen's Clepsis Moth) – 15-VII-2001 1, 27-VII-2002 1, 17-VIII-2002 2, 20A-VII-2003 1, 27A-VII-2003 2, 25-VII-2004 2, 13B-VII-2006 2, 26B-VI-2007 2, 10A-VIII-2008 1 and 10C-VIII-2008 1.
512. *Ptycholoma peritana* (Clem.) (3688. *Ptycholoma peritana* (Clem.)) (Garden Tortrix) – 15-VII-2001 1, 20B-VII-2003 2, 27A-VII-2003 1, 25-VII-2004 1, 30-VIII-2004 1 and 3A-VIII-2006 1.
513. *Ptycholoma virescana* (Clem.) (3689. *Ptycholoma virescana* (Clem.)) – 4-VIII-2001 1, 30-VIII-2001 1, 17-VIII-2002 2, 25-VII-2004 1, 13A-VII-2006 2 and 10A-VIII-2008 1.

### Tortricidae, Tortricinae, Sparganothidini

516. *Sparganothis sulfureana* (Clem.) (3695. *Sparganothis sulfureana* (Clem.)) (Sparganothis Fruitworm Moth) – 15-VII-2001 1, 27-VII-2002 1 and 20B-VII-2003 1 and 27B-VII-2003 1.
518. *Sparganothis xanthoides* (Wlk.) (3706. *Sparganothis xanthoides* (Wlk.)) (Mosaic Sparganothis Moth) – 22-VI-2001 1, 5-VII-2001 3, 15-VII-2001 1, 17-VIII-2002 1, 20A-VII-2003 1, 27A-VII-2003 1, 25-VII-2004 1 and 13B-VII-2006 1.
520. *Sparganothis unifasciana* (Clem.) (3711. *Sparganothis unifasciana* (Clem.)) (One-lined Sparganothis Moth) – 22-VI-2001 1, 15-VII-2001 1, 27-VII-2002 1, 10B-VII-2003 1, 20A-VII-2003 2, 20B-VII-2003 2, 27B-VII-2003 1 and 10C-III-2008 1.
521. *Sparganothis vocaridorsana* Kft. (3712. *Sparganothis vocaridorsana* Kft.) – 19B-VI-2005 1 and 12B-VI-2006 2.
522. *Sparganothis reticulatana* (Clem.) (3720. *Sparganothis reticulatana* (Clem.)) (Reticulated Fruitworm Moth) – 4-VIII-2001 1, 13A-VII-2006 1, 27B-VII-2006 2 and 25A-VII-2007 1.
523. *Platynota idaeusalis* (Wlk.) (3740. *Platynota idaeusalis* (Wlk.)) (Tufted Apple Bud Moth) – 27-VII-2002 1 and 26A-VI-2007 1.

### Tortricidae, Tortricinae, Euliini

528. *Apotomops wellingtoniana* (Kft.) (3589. *Anopina wellingtoniana* (Kft.)) – 24B-VI-2006 1.

### Tortricidae, Olethreutinae

Species indet. – 25-VII-2004 5, 13B-VII-2006 1, 3A-VIII-2006 1 and 10B-VIII-2008 1.

### Tortricidae, Olethreutinae, Endotheniini

533. *Endothenia nubilana* (Clem.) (2743a. *Endothenia quadrimaculana nubilana* (Clem.)) (Dusky Leafroller) – 15-VII-2001 1, 4-VIII-2001 1, 30-VIII-2001 1, 9B-IX-2002 1, 20A-VII-2003 1, 30-VIII-2004 1 and 19A-VI-2005 7.



537. *Bactra furfurana* (Haw.) (2706. *Bactra furfurana* (Haw.)) – 27B-VII-2003 1.
538. *Bactra verutana* Zell. (2707. *Bactra verutana* Zell. (Javelin Moth)) – 17-IX-2001 1 and 8B-VIII-2003 1.
547. *Apotomis removana* (Kft.) (2766. *Apotomis dextrana* (McD.)) (Green Aspen Leafroller) – 15-VII-2001 1, 4-VI-2004 1, 13A-VII-2006 2, 3B-VIII-2006 1, 26C-VI-2007 1, 10A-VIII-2008 1 and 10B-VIII-2008 1.

551. *Apotomis capreana* (Hbn.) (2753. *Apotomis capreana* (Hbn.)) – 15-VII-2001 1 and 4-VIII-2001 1.
552. *Apotomis deceptana* (Kft.) (2765. *Apotomis deceptana* (Kft.)) (Deceptive Apotomis Moth) – 24B-VI-2006 1 and 25B-VII-2007 1.
556. *Pseudosciaphila duplex* (Wlsm.) (2769. *Pseudosciaphila duplex* (Wlsm.)) (Spotted Aspen Leafroller or Poplar Leafroller Moth) – 22-VI-2001 1, 23-VI-2002 1, 24B-VI-2006 1 and 24C-VI-2006 1.
557. *Orthotaenia undulana* (D. & S.) (2770. *Orthotaenia undulana* (D. & S.)) (Dusky Leafroller Moth) – 22-VI-2001 1, 5-VII-2001 1, 23-VI-2002 1, 29B-VI-2003 1, 19A-VI-2005 1, 24A-VI-2006 1, 24C-VI-2006 1 26A-VI-2007 1, 26B-VI-2007 1, 26C-VI-2007 1, 26D-VI-2007 1, 19A-VI-2008 1, 19B-VI-2008 1 and 19C-VI-2008 2.
- Olethreutes* spp. – 22-VI-2001 2, 15-VII-2001 7, 23-VI-2002 1, 20B-VII-2003 1, 25-VII-2004 3, 24A-VI-2006 1, 24B-VI-2006 1, 13B-VII-2006 1 and 26A-VI-2007 1. Many of the species in this genus are difficult to identify and require genitalic examination.
560. *Olethreutes inornatana* (Clem.) (2788. *Olethreutes inornatana* (Clem.)) or 561. *Olethreutes quadrifidum* (Zell.) (2794. *Olethreutes quadrifidus* (Zell.)) – 24A-VI-2006 1 and 24B-VI-2006 1.
566. *Olethreutes galaxana* Kft. (2835. *Olethreutes galaxana* Kft.) – 26B-VI-2007 11.
575. *Olethreutes bipartitana* (Clem.) (2848. *Olethreutes bipartitana* (Clem.)) (Divided Olethreutes Moth) – 22-VI-2001 2 and 13A-VII-2006 1.
584. *Hedya ochroleucana* (Frölich) (2861. *Hedya ochroleucana* (Frölich)) (Off-white Hedya Moth) – 15-VII-2001 2, 27A-VII-2003 1, 25-VII-2004 1, 10B-VIII-2008 1 and 10C-VIII-2008 1.
585. *Hedya nubiferana* (Haw.) (2862. *Hedya nubiferana* (Haw.)) (Marbled Orchard Tortrix Moth) – 4-VIII-2001 5, 27-VII-2002 1 and 8A-VIII-2003 1.

#### Tortricidae, Olethreutinae, Enarmoniini

587. *Ancylis subaequana* (Zell.) (3355. *Ancylis subaequana* (Zell.)) – 19B-VI-2008 1 and 12C-VI-2009 1.
595. *Ancylis comptana* (Frölich) (3374. *Ancylis comptana* (Frölich)) (Strawberry Leafroller) – 23-VI-2002 1.
601. *Ancylis mediofasciana* (Clem.) (3384. *Ancylis mediofasciana* (Clem.)) – 20A-V-2005 1, 24A-V-2006 1 and 23C-V-2009 1.

#### Tortricidae, Olethreutinae, Enarmoniini

604. *Hystrichophora stygiana* (Dyar) (3391. *Hystrichophora stygiana* (Dyar)) – 22-VI-2001 1.

#### Tortricidae, Olethreutinae, Eucosmini

616. *Phaneta awemeana* (Kft.) (2911. *Phaneta awemeana* (Kft.)) – 23A-V-2009 1 and 23B-V-2009 1.
618. *Phaneta umbrastriana* (Kft.) (2913. *Phaneta umbrastriana* (Kft.)) – 31-V-2001 1.
624. *Phaneta verna* Miller (2926. *Phaneta verna* Miller) – 26A-V-2007 1.
626. *Phaneta marmontana* (Kft.) (2933. *Phaneta marmontana* (Kft.)) – 15-VII-2001 1, 24B-VI-2006 3 and 24C-VI-2006 2.
628. *Phaneta parmatana* (Clem.) (2932. *Phaneta alterana* (Heinr.) and 2937. *Phaneta parmatana* (Clem.)) – 15-VII-2001 1 and 25-VII-2004 1.
629. *Phaneta convergana* (McD.) (2940. *Phaneta convergana* (McD.)) – 29-V-2002 1.

636. *Phaneta tarandana* (Mösch.) (2956. *Phaneta tarandana* (Mösch.)) – 22-VI-2001 1, 5-VII-2001 1, 4-VIII-2001 2, 9A-IX-2002 1 and 12B-VI-2003 1.
641. *Phaneta fertoriana* (Heinr.) (2965. *Phaneta fertoriana* (Heinr.)) – 29B-VI-2003 2 and 19A-VI-2005 1.
643. *Phaneta indagatricana* (Heinr.) (2969. *Phaneta indagatricana* (Heinr.)) – 20A-VII-2003 1, 27A-VII-2003 2, 8A-VIII-2003 2, 8A-VIII-2003 3 and 25-VII-2004 1.
645. *Phaneta striatana* (Clem.) (2973. *Phaneta striatana* (Clem.)) – 15-VII-2001 1, 27B-VII-2003 2 and 10A-VIII-2008 1.
648. *Phaneta pallidicostana* (Wlsm.) 2980. *Phaneta pallidicostana* (Wlsm.) – 22-VI-2001 1, 15-VII-2001 8, 4-VIII-2001 1, 29A-VI-2003 2, 20A-VII-2003 2, 27A-VII-2003 1, 25-VII-2004 6, 24C-VI-2006 1, 13A-VII-2006 4, 13B-VII-2006 4 and 10A-VIII-2008 1.
650. *Phaneta infimbriana* (Dyar) (2985. *Phaneta infimbriana* (Dyar)) – 4-VIII-2001 1, 27A-VII-2003 1, 25-VII-2004 4 and 13A-VII-2006 1.
651. *Phaneta octopunctana* (Wlsm.) (2986. *Phaneta octopunctana* (Wlsm.)) – 15-VII-2001 2 and 25-VII-2004 1.
654. *Phaneta offectalis* (Hulst) (3005. *Phaneta offectalis* (Hulst)) – 23-VI-2002 1, 24B-V-2006 4, 24C-V-2006 6 and 13A-VII-2006 2.
656. *Eucosma ridingsana* (Rob.) (3014. *Eucosma ridingsana* (Rob.)) (Riding's Eucosma Moth, Snakeweed Borer Moth) – 4-VIII-2001 3, 27A-VII-2003 3, 8A-VIII-2, 25-VII-2004 4 and 3A-VIII-2006 1.
660. *Eucosma serpentana* (Wlsm.) (3031. *Eucosma serpentana* (Wlsm.)) – 4-VIII-2001 1.
662. *Eucosma morrisoni* (Wlsm.) (3035. *Eucosma morrisoni* (Wlsm.)) – 15-VII-2001 4, 4-VIII-2001 1, 22-VIII-2001 1, 27-VII-2002 4, 29A-VI-2003 2, 29B-VII-2003 4, 27A-VII-2003 2, 27V-VII-2003 2, 8A-VIII-2003 1, 8B-VIII-2003 3, 30A-VIII-2003 1 and 25-VII-2004 3.
664. *Eucosma agricolana* (Wlsm.) (3037. *Eucosma agricolana* (Wlsm.)) – 15-VII-2001 2, 23-VI-2002 7, 27-VII-2002 3, 10B-VII-2003 1, 20B-VII-2003 1, 4-VI-2004 5, 18-VI-2004 1, 25-VII-2004 7, 19A-VI-2005 3, 19B-VI-2005 6 and 13A-VII-2006 1.
683. *Eucosma dorsisignatana* (Clem.) (3116. *Eucosma dorsisignatana* (Clem.)) (Triangle-backed Eucosma Moth) – 16B-VIII-2006 1 and 10A-VIII-2008 2.
684. *Eucosma similiana* (Clem.) (3116.2. *Eucosma similiana* (Clem.)) – 9A-IX-2002 1, 3B-VIII-2006 1 and 16C-VIII-2006 1.
685. *Eucosma juncticiliana* (Wlsm.) (3119. *Eucosma juncticiliana* (Wlsm.)) – 27-VII-2002 2, 27B-VII-2003 1, 25-VII-2004 2, 3A-VIII-2006 1, 10A-VIII-2008 1 and 10C-VIII-2008 1.
692. *Eucosma cataclystiana* (Wlk.) (3142. *Eucosma cataclystiana* (Wlk.)) (Solidago Eucosma Moth) – 5-VII-2001 1, 15-VII-2001 1, 25-VII-2004 2, 24C-VI-2006 1 and 13B-VII-2006 2.
707. *Notocelia purpurissitana* Heinr. (3209. *Notocelia purpurissitana* Heinr.) – 25B-VII-2007 1.
709. *Notocelia culminana* (Wlsm.) (3211. *Notocelia culminana* (Wlsm.)) – 9-VIII-2001 9, 17-VIII-2002 5, 20B-VII-2003 1, 25-VII-2004 2, 3A-VIII-2006 1, 3C-VIII-2006 1, 10B-VIII-2008 1 and 10C-VIII-2008 1.
710. *Gypsonoma fasciolana* (Clem.) (3223. *Gypsonoma fasciolana* (Clem.)) – 31-V-2001 2, 22-VI-2001 1, 23-VI-2002 1, 4-VI-2004 212A-VI-2009 1, 12B-VI-2009 1 and 12C-VI-2009 1.
714. *Gypsonoma substitutionis* Heinr. (3227. *Gypsonoma substitutionis* Heinr.) – 24A-VI-2006 2, 24B-VI-2006 2, 13A-VII-2006 1 and 10B-VIII-2008 1.
725. *Pseudexentera oregonana* (Wlsm.) 3248. *Pseudexentera oregonana* (Wlsm.) (Early Aspen Leafroller) – 1-IV-2001 2, 25-IV-2001 2 and 10-V-2002 1.
728. *Rhopobota unipunctana* (Haw.) (3276. *Rhopobota naevana* (Haw.)) – 24-IX-2001 1.
733. *Epinotia castaneana* (Wlsm.) (3288. *Epinotia castaneana* (Wlsm.)) – 24A-VI-2006 3 and 24B-VI-2006 3.

740. *Epinotia nisella* Cl. (3306. *Epinotia nisella* Cl.) (Variable Tortrix Moth) – 22-VII-2001 5, 4-VIII-2001 4, 22-VIII-2001 1, 9A-IX-2002 5, 27B-VII-2003 1, 25-VII-2004 1, 13A-VII-2006 1, 10A-VIII-2008 1 and 10B-VIII-2008 1.
741. *Epinotia criddleana* Kft. (3307. *Epinotia criddleana* Kft.) – 4-VII-2001 2, 22-VIII-2001 2, 17-VIII-2002 1, 9A-IX-2002 2, 3A-VIII-2006 1 and 10C-VIII-2008 1.
753. *Epinotia lomonana* (Kft.) (3342. *Epinotia lomonana* (Kft.)) – 17-IX-2001 1 and 9A-IX-2002 2.
757. *Epinotia lindana* (Fern.) (3351. *Epinotia lindana* (Fern.)) (Diamondback Epinotia Moth) – 16C-VIII-2006 2.

#### **Tortricidae, Olethreutinae, Grapholitini**

780. *Cydia flexiloqua* (Heinr.) (3465. *Cydia flexiloqua* (Heinr.)) – 25-VII-2004 1.

#### **EPERMINIIDAE – Fringe-tufted Moths**

791. *Ochromolopis ramapoella* (Kft.) (2334. *Ochromolopis ramapoella* (Kft.)) – 23-VI-2002 1, 18-VI-2004 1, 20A-V-2005 1, 31-V-C005 1, 19A-VI-2005 1, 24A-VI-2006 1 and 26D-VI-2007 2. Reported as new for Alberta in Pohl et al. (2005).

#### **ALUCITIDAE – Many Plume Moths**

792. *Alucita montana* Barnes & Lindsay (2313. *Alucita hexadactyla* (L.)) (Six Plume Moth) – 22-VIII-2001 1, 17-IX-2001 1, 23-VI-2002 1, 30B-VIII-2003 1, 22B-IV-2005 1 and 10C-VIII-2008 3. B. Landry and J.-F. Landry (2004) have shown that true *A. hexadactyla* does not occur in North America and that instead we have three other species, all of which are known from Alberta.

#### **PTEROPHORIDAE – Plume Moths**

- indet Pterophorids – 29-VI-2003 2, 10-VII-2003 2, 27-VII-2003 4, 25-VII-2004 2 and 3-VIII-2006 2. These are presently being determined by Doug Macaulay.

#### **Pterophoridae, Pterophorinae, Platyptiliini**

800. *Gillmeria pallidactyla* (Haw.) (6107. *Gillmeria pallidactyla* (Haw.)) – 24-VI-2006 6.

#### **Pterophoridae, Pterophorinae, Oidaematophorini**

822. *Hellinsia homodactylus* (Wlk.) (6203. *Hellinsia homodactylus* (Wlk.)) – 27-VII-2002 1.
824. *Hellinsia pectodactylus* (Staud.) (6205. *Hellinsia pectodactylus* (Staudinger)) – 13-VII-2006 3.
830. *Hellinsia arion* (B. & L.) (6232. *Hellinsia arion* (B. & L.)) – 20-VII-2003 1.
833. *Oidaematophorus mathewianus* (Zell.) (6166. *Oidaematophorus mathewianus* (Zell.)) (Mathew's Plume Moth) – 27-VII-2002 1, 27-VII-2003 1 and 13-VII-2006 7.
839. *Oidaematophorus brucei* (Fern. (6185. *Oidaematophorus brucei* (Fern.)) – 20-VII-2003 1.

#### **PYRALIDAE – Pyralid Moths**

##### **Pyralidae, Pyralinae, Pyralini**

854. *Dolichomia olinalis* (Gn.) 5533. *Herculia olinalis* (Gn.) (Yellow-fringed Dolichomia Moth) – 25-VII-2004 1.

### **Pyralidae, Epipaschiinae**

858. *Pococera asperatella* (Clem.) (5606. *Tetralopha asperatella* (Clem.)) (Maple Webworm Moth) – 24B-VI-2006 1 and 13A-VII-2006 2.

### **Pyralidae, Phycitinae, Phycitini**

861. *Acrobasis tricolorella* Grt. (5655. *Acrobasis tricolorella* Grt.) (Tricolored Acrobasis Moth) – 25-VII-2004 1, 13A-VII-2006 1 and 10C-VIII-2008 1.

864. *Myelopsis subtetricella* (Rag.) (5718. *Myelopsis subtetricella* (Rag.)) – 23-VI-2002 1, 29B-VI-2003 1, 4-VI-2004 4, 18-VI-2004 1 and 25-VII-2004 2.

865. *Apomyelois bistriatella* (Hulst) (5721. *Apomyelois bistriatella* (Hulst)) – 25-VII-2004 1, 13A-VII-2006 3, 13B-VII-2006 1, 3A-VIII-2006 1 and 10B-VIII-2008 1.

890. *Meroptera pravella* (Grt.) (5787. *Meroptera pravella* (Grt.)) (Lesser Aspen Webworm) – 4-VIII-2001 1, 23-VI-2002 1, 24A-V-2006 1, 24C-VI-2006 1, 24B-VI-2006 112B-VI-2009 1 and 12C-VI-2009 1.

891. *Sciota basilaris* (Zell.) (5799. *Nephopterix basilaris* Zell.) – 23-VI-2002 1, 24B-VI-2006 1 and 24C-VI-2006 1.

896. *Telethusia ovalis* (Pack.) (5812. *Telethusia ovalis* (Pack.)) – 15-VII-2001 3, 27-VII-2002 1, 20A-VII-2003 7, 27A-VII-2003 1, 8B-VIII-2003 1, 25-VII-2004 5 and 10A-VIII-2008 1.

899. *Pyla aequivoca* Heinr. (5824. *Pyla aequivoca* Heinr.) – 13A-VII-2006 1.

901. *Pyla aenigmatica* Heinr. (5827. *Pyla aenigmatica* Heinr.) – 15-VII-2001 1.

906. *Dioryctria abietivorella* (Grt.) 5841. *Dioryctria abietivorella* (Grt.) (Evergreen Coneworm Moth) – 10B-VIII-2008 2. Both *D. abietivorella* and *D. reniculelloides* have been identified from Buffalo Lake but they are notoriously difficult to distinguish without genitalic examination (Sopow et al. 1996). Caroline Whitehouse later identified the following additional specimen as *abietivorella*: 10B-VIII-2008 (BIRD23228). Caroline also identified one specimen as *reniculelloides*: 10B-VIII-2008 (BIRD23227). As neither specimen was examined genitalically, it is probably best to refer to them as simply *Dioryctria* sp.

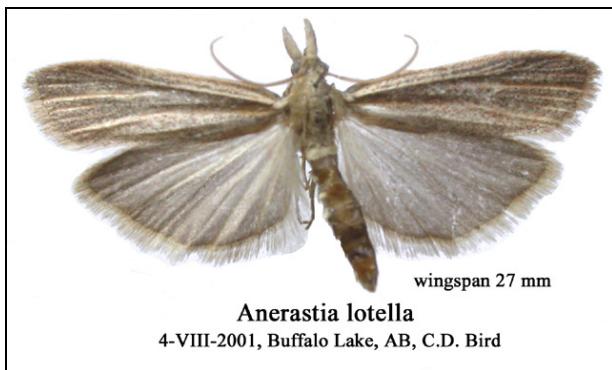
912. *Sarata cauderella* (Dyar) (5870. *Sarata cauderella* (Dyar)) – 9-VIII-2002 1.

918. *Hulstia undulatella* (Clem.) (5918. *Hulstia undulatella* (Clem.)) – 30A-VIII-2003 1.

920. *Zophodia grossulariella* (Hbn.) (5968. *Zophodia convolutella* (Hbn.)) (Gooseberry Fruitworm Moth) – 28-IV-2001 2, 7-V-2001 2, 19-V-2002 3, 29-V-2002 6, 20A-V-2005 1, 24C-V-2006 2, 23A-V-2009 1, 23B-V-2009 1 and 23C-V-2009 1.

### **CRAMBIDAE – Snout Moths**

#### **Pyralidae, Phycitinae, Anerastiini**



930. *Anerastia lotella* (Hbn.) (6038. *Anerastia lotella* (Hbn.)) – 22-VI-2001 2, 4-VIII-2001 1, 9-IX-2002 1, 30-VIII-2004 1 and 10B-VIII-2008 1.

#### Crambidae, Scopariinae

935. *Scoparia biplagialis* Wlk. (4716. *Scoparia biplagialis* Wlk.) (Double-striped Scoparia Moth) – 4-VIII-2001 2, 22-VIII-2001 2, 27-VII-2002 1, 17-VIII-2002 3, 9-IX-2002 2, 13A-VII-2006 1, 13B-VII-2006 1, 10A-III-2008 1 and 10B-VIII-2008 1.

#### Crambidae, Crambinae, Haimbachiiini

941. *Occidentalia comptulatilis* (Hulst) (5474. *Acigona comptulatilis* (Hulst)) – 15-VII-2001 2, 15-VII-2001 2, 4-VIII-2001 3, 27A-VII-2003 1, 27B-VII-2003 1, 25-VII-2004 3 and 10C-VIII-2008 1.

#### Crambidae, Crambinae, Crambini

948. *Chrysoteuchia topiarius* (Zell.) (5391. *Chrysoteuchia topiaria* (Zell.)) (Cranberry Girdler) – 15-VII-2001 1, 23-VI-2002 6, 29B-VI-2003 2, 20B-VII-2003 1, 25-VII-2004 1, 24A-VI-2006 1, 24B-VI-2006 1 and 24C-VI-2006 2.

953. *Crambus perlella* (Scop.) (5343a. *Crambus perlellus innotatellus* (Wlk.)) – 5-VII-2001 1, 15-VII-2001 1, 4-VIII-2001 3, 22-VII-2002 1, 17-VIII-2002 2, 9-IX-2002 2, 20A-VII-2003 1, 27A-VII-2003 1, 25-VII-2004 1, 13A-VII-2006 1 and 10B-VIII-2008 1.

954. *Crambus unistriatellus* Pack. (5344. *Crambus unistriatellus* Pack.) – 17-VIII-2002 1 and 27B-VII-2003 1.

955. *Crambus whitmerellus browni* Klots (5345. *Crambus whitmerellus browni* Klots) – 22-VI-2001 3 and 19-VI-2004 1.

959. *Crambus ainsliellus* Klots or 961 *Crambus leachellus* (Zinck.) (5354 *Crambus ainsliellus* Klots or 5357 *Crambus leachellus* (Zinck.)) – 22-VIII-2001 1, 30-VIII-2001 1, 9-IX-2002 7 and 30-VIII-2004 1. Both species occur in Alberta. The adults look alike and examination of the male genitalia is necessary to differentiate them. Most, if not all, appear to be *Crambus ainsliellus*.



963. *Crambus girardellus* Clem. (5365. *Crambus girardellus* Clem.) – 22-VI-2001 3, 17-VIII-2002 1 and 29B-VI-2003 1.
967. *Agriphila ruricolellus* (Zell.) (5399. *Agriphila ruricolella* (Zell.)) (Lesser Vagabond Sod Webworm Moth) – 27-VII-2002 1, 17-VIII-2002 3, 9-IX-2002 1, 8A-VIII-2003 1, 25-VII-2004 1, 13A-VII-2006 1, 13B-VII-2006 3, 3A-VIII-2006 1 and 25A-VII-2007 1.
968. *Agriphila vulgivagellus* (Clem.) (5403. *Agriphila vulgivagella* (Clem.)) (Vagabond Crambus or Vagabond Sod Webworm Moth) – 30-VIII-2001 1 and 30-VIII-2004 1, 10A-VIII-2008 1 and 10C-VIII-2008 1.



970. *Neodactria luteolellus* Clem. (5379. *Neodactria luteolella* Clem.) (Mottled Grass-veneer Moth) – 23-VI-2002 4, 24A-VI-2006 1, 24C-VI-2006 1 and 26C-VI-2007 1.
974. *Pediasia aridella edmontella* (McD.) or 978 *Pediasia ericellus* (B. & McD.) (5410a *Pediasia aridella edmontella* or 5415 *Pediasia ericella* (B. & McD.)) – 22-VIII-2001 1, 27A-VII-2003 2 and 25-VII-2004 1. These are females of either *P. aridella edmontella* or *P. ericella*.
974. *Pediasia aridella edmontella* (McD.) (5410a. *Pediasia aridella edmontella* (McD.)) – 27A-VII-2003 1.



976. *Pediasia trisecta* (Wlk.) (5413. *Pediasia trisecta* (Wlk.)) (Sod Webworm Moth) – 15-VII-2001 1, 22-VIII-2001 2, 30-VIII-2001 1, 9A-IX-2002 2, 9B-IX-2002 2, 8A-VIII-2003 3, 30-VIII-2004 2, 10A-VIII-2008 1, 10B-VIII-2008 1 and 10C-VIII-2008 1.
978. *Pediasia ericellus* (B. & McD.) (5415. *Pediasia ericella* (B. & McD.)) – 17-VIII-2002 2, 10A-VII-2003 1, 10B-VII-2003 1 and 27A-VII-2003 1.
980. *Pediasia dorsipunctellus* (Kft.) (5417. *Pediasia dorsipunctella* (Kft.)) – 31-V-2001 1, 12-VI-2001 1, 15-VII-2001 2, 4-VIII-2001 3, 27-VII-2002 1, 17-VIII-2002 9, 9-IX-2002 7, 20A-VII-2003 1, 8A-VIII-2003 3, 25-VII-2004 2, 30-VIII-2004 2, 13A-VII-2006 1 and 16B-VIII-2006 1.



983. *Thaumatopsis pexella coloradellus* Kft. (5439b. *Thaumatopsis pexella coloradella* Kft.) – 30-VIII-2001 1.

#### Crambidae, Schoenobiinae

985. *Donacaulea melinellus* (Clem.) (5316. *Donacaulea melinella albicostella* (Fern.)) – 15-VII-2001 1. Edda Martinez, who monographed the genus for her PhD thesis, found this to be the subspecies *albicostella*.

*Donacaulea* n. sp. 1 – 20A-VII-2003 1. This specimen which was called 5319 *D. longirostrella* (Clem.) in earlier reports, has been found to belong to a species that is being described by Edda Martinez.

#### Crambidae, Acentropinae, Nymphulini

990. *Paraponyx maculalis* (Clem.) (4759. *Parapoynx maculalis* (Clem.)) (Polymorphic Pondweed Moth) – 15-VII-2001 1.

#### **Crambidae, Acentropinae, Argyractini**

991. *Petrophila kearfottalis* (B. & McD.) (4773. *Petrophila kearfottalis* (B. & McD.)) – 15-VII-2001 1, 4-VIII-2001 8, 22-VIII-2001 1, 27B-VII-2003 1, 25-VII-2004 2 and 10B-VIII-2008 1.

#### **Crambidae, Pyraustinae, Pyraustini**

1011. *Fumibotys fumalis* (Gn.) (4950. *Fumibotys fumalis* (Gn.)) – 25-VII-2004 1.

1012. *Perispasta caeculalis* Zell. (4951. *Perispasta caeculalis* Zell.) – 24-VI-2002 3 and 19B-VI-2005 1.

1013. *Anania coronata* (Hufn.) (4953. *Phlyctaenia coronata* (Hufn.)) (Crowned Phlyctaenia Moth) – 12B-VI-2009 1.

1015. *Anania mysippusalis* (Wlk.) (4957. *Mutuuraia mysippusalis* (Wlk.)) – 15-VII-2001 1 and 24B-VI-2006 1.

1018. *Sitochroa chortalis* (Grt.) (4987. *Sitochroa chortalis* (Grt.)) – 23-VI-2002 1, 29B-VI-2003 1, 19B-VI-2005 1, 12A-VI-2009 1 and 12C-VI-2009 1.

1021. *Loxostege sticticalis* (L.) (5004. *Loxostege sticticalis* (L.)) (Beet Webworm) – 22-VIII-2001 1, 12B-VI-2003 1, 27A-VII-2003 1, 8A-VIII-2003 1, 30A-VIII-2003 1+4 SR, 30B-VIII-2003 1 SR, 4-VI-2004 1, 19A-VI-2005 1, 19B-VI-2005 2 and 3A-VIII-2006 2. Very common in 2003.

1025. *Loxostege cereralis* (Zell.) (5017. *Loxostege cereralis* (Zell.)) (Alfalfa Webworm Moth) – 25-VII-2004 1.

1026. *Pyrausta nicalis* (Grt.) (5032. *Pyrausta nicalis* (Grt.)) – 15-VII-2001 1.

1033. *Pyrausta scurralis awemealis* (Mun.) (5065. *Pyrausta scurralis* (Hulst)) – 4-VIII-2001 1, 25-VII-2004 1, 3A-VIII-2006 3, 3B-VIII-2006 1 and 10B-VIII-2008 1. Known elsewhere in Alberta only at Big Knife Provincial Park.

1034. *Pyrausta unifascialis* (Pack.) (5068. *Pyrausta unifascialis* (Pack.)) (Pussytoes Pyrausta Moth) – 22-VI-2001 5, 5-VII-2001 3, 23-VI-2002 2, 29B-VI-2003 1, 10B-VII-2003 1, 4-VI-2004 124N-VI-2006 1, 24C-VI-2006 2, 26A-VI-2007 1, 26C-VI-2007 2 and 26D-VI-2007 1.

1035. *Pyrausta fodinalis* (Led.) (5074. *Pyrausta fodinalis* (Led.)) – 22-VI-2001 1, 4-VIII-2001 2, 23-VI-2002 1, 27-VII-2002 1, 17-VIII-2002 2, 22-VIII-2002 3, 20A-VII-2003 1, 27A-VII-2003 2, 8A-VIII-2003 1, 25-VII-2004 2, 24A-VI-2006 1, 26A-VI-2007 1, 26C-VI-2007 1, 26D-VI-2007 1 and 10A-VIII-2008 1.

1036. *Pyrausta socialis* (Grt.) (5075. *Pyrausta socialis* (Grt.)) – 15-VII-2001 2.

#### **Crambidae, Pyraustinae, Spilomelini**

1039. *Choristostigma plumbosignalis* (Fern.) (5128. *Choristostigma plumbosignalis* (Fern.)) – 13A-VII-2006 1.

1052. *Mecyna submedialis* (Grt.) (5135. *Mecyna submedialis* (Grt.)) (Orange-toned Mecyna Moth) – 15-VII-2001 4, 27-VII-2002 1, 29A-VI-2003 1, 20A-VII-2003 1, 27A-VII-2003 1, 8A-VIII-2003 1, 25-VII-2004 2 and 13B-VII-2006 1.

1053. *Mecyna mustelinalis* (Pack.) (5137. *Mecyna mustelinalis* (Pack.)) – 15-VII-2001 1.

#### **HESPERIIDAE – Skippers**

#### **Hesperiidae, Pyrginae, Erynnini**

1061. *Erynnis persius* (Scud.) (3961. *Erynnis persius* (Scudder)) (Persius Duskywing) – 26A-V-2007 5.

### ***PIERIDAE – White and Sulphur Butterflies***

#### **Pieridae, Coliadinae**

1097. *Colias christina* Edw. (4211e. *Colias christina* Edw.) – 19A-VI-2005 1.

### ***LYCAENIDAE – Blue & Copper Butterflies***

#### **Lycaenidae, Polyommatinae, Polyommatini**

1150. *Plebejus melissa* (Edw.) (4375. *Lycaeides melissa* (Edw.)) – 18-VI-2004 1.

1151. *Aricia saepiolus amica* (Edw.) (4376. *Plebejus saepiolus* (Bdv.) (Greenish Blue)) – 26A-VI-2007 1.

### ***NYMPHALIDAE – Fritillaries***

#### **Nymphalidae, Heliconiinae, Argynnini**

1166. *Boloria bellona jenistai* Stall. & Turn. (4465b. *Boloria bellona* (Fabr.)) (Meadow Fritillary) – 26A-V-2007 2.

#### **Nymphalidae, Nymphalinae, Nymphalini**

1186. *Vanessa cardui* (L.) (4435. *Vanessa cardui* (L.)) (Painted Lady) – 19A-VI-2005 1.

### ***SATYRIDAE – Browns & Arctics***

#### **Satyridae, Satyrinae, Satyrini**

1219. *Erebia discoidalis* (Kby.) (4596. *Erebia discoidalis* (Kby.)) (Red-disked Alpine) – 26A-V-2007 1.

1228. *Oeneis alberta* (Elwes & Edw.) (4608. *Oeneis alberta* Elwes) (Alberta Arctic) – 26A-V-2007 1.

### ***DREPANIDAE – Lutestrings and Hooktips***

#### **Drepanidae, Thyatirinae, Habrosyninae**

1231. *HabroSYne scripta* (Gosse) (6235. *HabroSYne scripta* (Gosse)) (The Scribe or The Lettered HabroSYne) – 24A-VI-2006 1.

#### **Drepanidae, Thyatirinae, Macrothyatirini**

1233. *Euthyatira pudens* (Gn.) (6240. *Euthyatira pudens* (Gn.)) (Dogwood Thyatirid) – 28-IV-2001 1 and EM, 15-V-2001 1, 19-V-2002 1, 23A-V-2009 1, 23B-V-2009 1 and 23C-V-2009 1.

### **Drepanidae, Thyatirinae, Ceranemotini**

1234. *Ceranemota albertae* Clarke (6248. *Ceranemota albertae* Clarke) (Alberta Lutestring) – 9A-IX-2002 1 and 30-VIII-2004 1.

### **GEOMETRIDAE – Inchworm or Geometrid Moths**

#### **Geometridae, Larentiinae, Cidariini**

1241. *Dysstroma citrata* (L.) (7182. *Dysstroma citrata* (L.)) – 22-VIII-2001 2, 9A-IX-2002 1, 24A-VI-2006 1, 24C-VI-2006 1, 16C-VIII-2006 1, 10A-VIII-2008 1 and 10B-VIII-2008 1.
1244. *Dysstroma truncata* (Hufn.) (7187. *Dysstroma truncata* (Hufn.)) (Marbled Carpet) – 13A-VII-2006 2.
1247. *Dysstroma hersiliata* (Gn.) (7189. *Dysstroma hersiliata* (Gn.)) (Orange-barred Carpet) – 24A-VI-2006 1, 24B-VI-2006 3 and 26C-VI-2007 1.
1252. *Eulithis propulsata* (Wlk.) (7199. *Eulithis propulsata* (Wlk.)) (Barred Yellow or Currant Eulithis) – 17-VIII-2002 1, 13A-VII-2006 1, 13B-VII-2006 1, 25B-VII-2007 1 and 10B-VIII-2008 1.
1253. *Eulithis testata* (L.) (7201. *Eulithis testata* (L.)) (Chevron Moth) – 22-VIII-2001 1, 17-VIII-2002 3, 9A-IX-2002 1, 3B-VIII-2006 1 and 16C-VIII-2006 1.
1255. *Eulithis flavibrunneata* (McD.) (7205. *Eulithis flavibrunneata* (McD.)) – 22-VIII-2001 1, 3A-VIII-2006 1, 3B-VIII-2006 1 and 3C-VIII-2006 1.
1257. *Eulithis xyloina* (Hulst) (7207. *Eulithis xyloina* (Hulst)) (The Phoenix) – 15-VII-2001 1, 27-VII-2002 1, 25-VII-2004 1, 24B-VI-2006 1 and 13A-VII-2006 1.
1260. *Ecliptoptera silaceata* (D. & S.) (7213. *Ecliptoptera silaceata* (D. & S.)) – 24A-VI-2006 1.
1262. *Plemyria georgii* Hulst (7216. *Plemyria georgii* Hulst) (Eyed Carpet) – 4-VIII-2001 1.

#### **Geometridae, Larentiinae, Hydriomenini**

1267. *Hydriomena perfracta* Swett (7229. *Hydriomena perfracta* Swett) (Marbled Carpet) – 24C-V-2006 1.
1271. *Hydriomena ruberata* (Frey.) (7254. *Hydriomena ruberata* (Frey.)) – 24A-V-2006 1, 29-V-2008 1, 23C-V-2009 1 and 12C-VI-2009 1.
1273. *Hydriomena furcata* (Thunb.) (7257. *Hydriomena furcata* (Thunb.)) (Common Highflyer) – 4-VIII-2001 1, 27-VI-2002 1, 27A-VII-2003 1, 25-VII-2004 1 and 3A-VIII-2006 1 and 10B-VIII-2008 1.
1287. *Perizoma basaliata* (Wlk.) (7316. *Perizoma basaliata* (Wlk.)) (Twin-spot Wave) – 24A-V-2006 1, 24A-VI-2006 1 and 24C-VI-2006 1.
1290. *Anticlea vasiliata* Gn. (7329. *Anticlea vasiliata* Gn.) (Variable Carpet) – 7-V-2001 1, 10-V-2002 1, 29-V-2002 1, 23B-V-2009 1 and 23C-V-2009 1.

#### **Geometridae, Larentiinae, Xanthorhoini**

1304. *Xanthorhoe decoloraria* (Esp.) (7384. *Xanthorhoe decoloraria* (Esper)) (American Carpet) – 27-VII-2002 1, 25-VII-2004 1 and 13A-VII-2006 1.
1306. *Xanthorhoe ferrugata* (Cl.) (7388. *Xanthorhoe ferrugata* (Cl.)) (Red Twin-spot) – 23-VI-2002 1 and 26C-VI-2007 1 and 19A-VI-2008 2..

1307. *Xanthorhoe lacustrata* (Gn.) (7390. *Xanthorhoe lacustrata* (Gn.)) (Toothed Brown Carpet) – 15-VII-2001 1.
1308. *Eprrhoe alternata* (Müller) (7394. *Eprrhoe alternata* (Müller)) (White-banded Toothed Carpet) – 24A-VI-2006 1, 24B-VI-2006 1 and 13A-VII-2006 1.
1311. *Euphyia intermediata* (Gn.) 7399a. *Euphyia alternata intermediata* (Gn.) (Sharp-angled Carpet) – 26A-VI-2007 1 and 12B-VI-2009 1.
1312. *Zenophleps alpinata* Cass. (7408. *Zenophleps alpinata* Cass.) – 17-VIII-2002 1, 30-VIII-2004 1, 3B-VIII-2006 1, 16C-VIII-2006 1, 10A-VIII-2008 1, 10B-VIII-2008 1 and 10C-VIII-2008 1.
1314. *Orthonama obstipata* (F.) (7414. *Orthonama obstipata* (F.)) – 17-IX-2001 1.

#### **Geometridae, Larentiinae, Asthenini**

1316. *Hydrelia albifera* Wlk.) (7423. *Hydrelia albifera* (Wlk.)) (Fragile White Carpet) – 26A-VI-2007 1.

#### **Geometridae, Larentiinae, Operophterini**

1322. *Eprrita autumnata* (Bkh.) (7433. *Eprrita autumnata* (Bkh.)) (Autumn Moth) – 9A-IX-2002 1.

#### **Geometridae, Larentiinae, Eupitheciini**

1326. *Horisme intestinata* (Gn.) (7445. *Horisme intestinata* (Gn.)) (Brown Bark Carpet) – 22-VI-2001 1, 23-VI-2002 1, 24C-V-2006 1, 24B-VI-2006 1, 12B-VI-2009 1 and 12C-VI-2009 1.
1327. *Horisme incana* Swett (7446. *Horisme incana* Swett) – 3-V-2001 1.
- Eupithecia* spp. (Pugs) – 26B-VI-2007 2, 19A-VI-2008 1, 12A-VI-2009 1, 12B-VI-2009 1 and 12C-VI-2009 1.
1335. *Eupithecia stellata* (Hulst) (7564. *Eupithecia stellata* (Hulst)) (Stellate Pug) – 22-VIII-2001 1, 9A-IX-2002 1, 27A-VII-2003 1, 3A-VIII-2006 1 and 3B-VIII-2006 1.
1336. *Eupithecia subfuscata* (Haw.) (7487. *Eupithecia subfuscata* (Haw.)) (Gray Pug) – 23-VI-2002 1, 24A-V-2006 1.
1345. *Eupithecia anticaria* Wlk. (7594. *Eupithecia anticaria* Wlk.) – 31-V-2001 3, 23-VI-2002 3, 24A-V-2006 2, 24B-V-2006 1 and 24A-VI-2006 11.
1346. *Eupithecia ravocostaliata* Pack. (7605. *Eupithecia ravocostaliata* Pack.) (Great Variegated Pug) – 25-IV-2001 1, 29-V-2002 2, 20A-V-2005 1 and 26A-V-2005 1.
1351. *Eupithecia interruptofasciata* Pack. (7551a. *Eupithecia pusillata interruptofasciata* Pack.) – 27A-VIII-2006 1 5.
1355. *Eupithecia satyrata* (Hbn.) (7520c. *Eupithecia satyrata dodata* Tayl.) (Alberta Pug) – 31-V-2001 1 and 4-VI-2004 1.
1360. *Eupithecia assimilata* Dbldy. (7528. *Eupithecia fumosa* Hulst) – 24A-V-2006 1 and 13A-VII-2006 1.
1367. *Eupithecia lachrymosa* (Hulst) (7548. *Eupithecia lachrymosa* (Hulst)) – 21-VI-2005 1.
1370. *Eupithecia regina* Tayl. (7483. *Eupithecia regina* Tayl.) – 24A-VI-2006 1 and 24B-VI-2006 1.

#### **Geometridae, Larentiinae, Eupitheciini**

1376. *Lobophora nivigerata* Wlk.) (7640. *Lobophora nivigerata* Wlk.) (Two-lined Aspen Looper) – 23-VI-2002 1 and 21-VI-2005 1, 24C-V-2006 1, 24B-VI-2006 1, 12B-VI-2009 1 and 12C-VI-2009 1.

1377. *Lobophora magnoliotidata* (Dyar) (7643. *Lobophora magnoliotidata* (Dyar)) – 23-VI-2002 1.

#### **Geometridae, Sterrhinae, Scopulini**

1383. *Scopula limboundata* (Haw.) (7159. *Scopula limboundata* (Haw.)) (Large Lace-border) – 10B-VIII-2008 1.
1386. *Scopula junctaria* Wlk. (7164. *Scopula junctaria* Wlk.) (Simple Wave) – 22-VI-2001 2, 24A-VI-2006 1, 24B-VI-2006 1, 24C-VI-2006 1, 13A-VII-2006 1, 26B-VI-2007 1, 26C-VI-2007 1 and 26D-VI-2007 1.
1388. *Scopula frigidaria* Mösch. (7166. *Scopula frigidaria* Mösch.) (Frigid Wave) – 24-IX-2001 1, 19A-VI-2005 1 and 19B-VI-2005 1.
1390. *Scopula inductata* Gn. (7169. *Scopula inductata* Gn.) (Soft-lined Wave) – 22-VI-2001 1, 15-VII-2001 4, 30-VIII-2001 1, 24-IX-2001 1, 27-VII-2002 1, 29B-VI-2003 1, 20A-VII-2003 1, 24A-VI-2006 3, 24C-VI-2006 1, 16B-VIII-2006 1 and 26D-VI-2007 1.

#### **Geometridae, Geometrinae, Nemoriini**

1394. *Nemoria unitaria* (Pack.) (7018. *Nemoria unitaria* (Pack.)) – 15-VII-2001 2 and 25-VII-2004 1.

#### **Geometridae, Geometrinae, Synchlorini**

1399. *Synchlora aerata* (F.) (7058. *Synchlora aerata* (F.)) (Wavy Lined Emerald) – 15-VII-2001 3, 27-VII-2002 2, 20A-VII-2003 1, 20B-VII-2003 1, 25-VII-2004 2, 24A-VI-2006 1, 13A-VII-2006 1 and 13B-VII-2006 1.

#### **Geometridae, Geometrinae, Hemitheini**

1401. *Mesothea incertata* (Wlk.) (7085. *Mesothea incertata* (Wlk.)) (Plain Emerald) – 26A-V-2007 1.

#### **Geometridae, Ennomiinae, Cassymini**

1405. *Nematocampa resistaria* (H.-S.) (7009. *Nematocampa resistaria* (H.-S.)) (Horned Spanworm Moth) – 25-VII-2004 1, 13A-VII-2006 1 and 10C-VIII-2008 1.

#### **Geometridae, Ennomiinae, Cassymini**

1406. *Protitame virginalis* (Hulst) (6270. *Protitame virginalis* (Hulst)) (Virgin Moth) – 23-VI-2002 1 and 4-VI-2004 3.

#### **Geometridae, Ennomiinae, Macariini**

1410. *Speranza ambloflava* (Ferg.) (6283. *Itame sulphurea* (Pack.)) (Spotted Sulphur) – 4-VIII-2001 1, 27-VII-2002 1, 20A-VII-2003 1, 27A-VII-2003 1, 25-VII-2004 1 and 30-VIII-2004 1.
1414. *Speranza bitactata* (Wlk.) (6304. *Itame bitactata* (Wlk.)) – 15-VII-2001 1, 27A-VII-2003 1, 27B-VII-2003 1, 25-VII-2004 324A-VI-2006 1, 24B-VI-2006 1, 13A-VII-2006 1, 13B-VII-2006 1, 3A-VIII-2006 1, 3B-VIII-2006 1, 25B-VII-2007 2, 25D-VII-2007 1 and 10B-VIII-2008 1.

1416. *Speranza occiduaria* (Pack.) (6279. *Itame occiduaria* (Pack.)) (Western Sulphur) – 22-VI-2001 4, 5-VII-2001 3, 15-VII-2001 2, 22-VIII-2001 1, 27-VII-2002 1, 29A-VI-2003 1, 29B-VI-2003 1, 10B-VII-2003 1, 18-VI-2004 1, 24A-VI-2006 1, 24C-VI-2006 1, 13A-VII-2006 1, 13B-VII-2006 1, 3C-VIII-2006 1, 26B-VI-2007 1, 25B-VII-2007 1 and 25D-VII-2007 1.
1421. *Speranza loricaria* (Evers.) (6290. *Itame loricaria* (Evers.)) (False Bruce Spanworm) – 22-VI-2001 1, 29A-VI-2003 2, 29B-VI-2003 2, 10B-VII-2003 2, 24A-VI-2006 1, 24B-VI-2006 1, 26B-VI-2007 1 and 26C-VI-2007 1.
1431. *Digrammia californiaria* (Pack.) (6380. *Semiothisa californiaria* (Pack.)) – 8A-VIII-2003 1, 8B-VIII-2003 1 and 25-VII-2004 1.
1433. *Digrammia denticulata* Grt. (6373. *Semiothisa denticulata* Grt.) (Striped Granite) – 23-VI-2002 1, 27-VII-2002 1, 12B-VI-2003 2, 29A-VI-2003 2, 8A-VIII-2003 1, 25-VII-2004 1 and 20A-V-2005 1.
1436. *Digrammia ripperatia* (Dup.) (6394. *Semiothisa hebetata* (Hulst)) – 4-VI-2004 1.
1438. *Digrammia mellistrigata* (Grt.) (6397. *Semiothisa mellistrigata* (Grt.)) – 15-VII-2001 1.
1440. *Digrammia neptaria* (Gn.) (6396. *Semiothisa neptaria* (Gn.)) – 4-VI-2004 1.

#### **Geometridae, Ennomiinae, Boarmiini**

1455. *Ectropis crepuscularia* (D. & S.) (6597. *Ectropis crepuscularia* (D. & S.)) (The Small Engrailed) – 23B-V-2009 1.

#### **Geometridae, Ennomiinae, Bistonini**

1460. *Biston betularia* (L.) (6640. *Biston betularia* (L.)) (Salt-and-Pepper Moth) – 22-VI-2001 2, 5-VII-2001 1, 24C-VI-2006 1 and 26C-VI-2007 1.
1461. *Lycia ursaria* (Wlk.) (6651. *Lycia ursaria* (Wlk.)) (The Bear or Stout Spanworm Moth) – 25-IV-2001 6, 28-IV-2001 1 and 10-V-2002 2.
1467. *Erannis tiliaria* (Harr.) (6665. *Erannis tiliaria* (Harr.)) (Linden Looper Moth) – 24-IX-2001 1 and 27-IX-2001 2.

#### **Geometridae, Ennomiinae, Baptini**

1468. *Lomographa semiclarata* (Wlk.) (6666. *Lomographa semiclarata* (Wlk.)) (Bluish Spring Moth) – 26A-V-2007 2.

#### **Geometridae, Ennomiinae, Caberini**

1472. *Cabera erythemaria* Gn. (6677. *Cabera erythemaria* Gn.) (Yellow-dusted Cream Moth) – 22-VI-2001 4, 4-VIII-2001 1, 24B-VI-2006 1, 13A-VII-2006 1, 26B-VI-2007 1, 26D-VI-2007 1, 19A-VI-2008 2 and 19C-VI-2008 1.
1473. *Cabera variolaria* Gn. (6678. *Cabera variolaria* Gn.) (The Vestal or Pale Striped Willow Spanworm) – 22-VI-2001 3, 15-VII-2001 2, 14-VIII-2001 1, 23-VI-2002 1, 17-VIII-2002 1, 25-VII-2004 1, 19B-VI-2005 1, 24A-VI-2006 2, 24B-VI-2006 1, 13A-VII-2006 1, 3A-VIII-2006 1, 26B-VI-2007 1, 26C-VI-2007 1 and 10B-VIII-2008 1.

#### **Geometridae, Ennomiinae, Angeronini**

1480. *Aspitates aberrata* (Hy. Edw.) (6715. *Aspitates aberratus* (Hy. Edw.)) – 24C-V-2006 1 and 4A-VI-2010 1.

1482. *Euchlaena obtusaria* (Hbn.) (6726. *Euchlaena obtusaria* (Hbn.)) (Obtuse Euchlaena) – 24A-VI-2006 1, 24B-VI-2006 1 and 24C-VI-2006 1.
1483. *Euchlaena johnsonaria* (Fitch) (6729. *Euchlaena johnsonaria* (Fitch)) (Johnson's Euchlaena) – 15-VII-2001 2, 24B-VI-2006 1, 13B-VII-2006 1, 26B-VI-2007 1, 26C-VI-2007 1 and 26D-VI-2007 1.
1485. *Euchlaena marginaria* (Minot) (6734. *Euchlaena marginaria* (Minot)) (Maple Spanworm) – 3-V-2001 1, 22-VI-2001 1, 24A-V-2006 1, 24C-V-2006 1 and 12B-VI-2009 2.
1486. *Euchlaena tigrinaria* (Gn.) (6737. *Euchlaena tigrinaria* (Gn.)) (Variable Thorn or Mottled Euchlaena) – 22-VI-2001 1, 15-VII-2001 1, 24A-VI-2006 1, 24B-VI-2006 1, 26B-VI-2007 1, 26D-VI-2007 1 and 19B-VI-2008 1.
1487. *Xanthotype urticaria* Swett (6740. *Xanthotype urticaria* Swett) – 24A-VI-2006 1.
1488. *Xanthotype sospeta* (Drury) (6743. *Xanthotype sospeta* (Drury)) (Crocus Geometer) – 24B-VI-2006 1 and 24C-VI-2006 1.

#### **Geometridae, Ennomiinae, Azelini**

1490. *Pero morrisonaria* (Hy. Edw.) (6755. *Pero morrisonaria* (Hy. Edw.)) (Lesser Umber or Morrison's Pero) – 31-V-2001 4, 22-VI-2001 1, 23-VI-2002 1, 24A-V-2006 1, 24A-VI-2006 1, 26B-VI-2007 1 and 12B-VI-2009 2.

#### **Geometridae, Ennomiinae, Campaeini**

1494. *Campaea perlata* (Gn.) 6796. *Campaea perlata* (Gn.) (Pale Beauty or Fringed Looper Moth) – 15-VII-2001 2, 25-VII-2004 1, 13A-VII-2006 1, 13B-VII-2006 1, 25B-VII-2007 1 and 10B-VIII-2008 1.

#### **Geometridae, Ennomiinae, Ennomini**

1495. *Ennomos magnaria* Gn. (6797. *Ennomos magnaria* Gn.) (Maple Spanworm) – 17-IX-2001 1, 17-VIII-2002 1, 9A-IX-2002 1 and 9B-IX-2002 1.

#### **Geometridae, Ennomiinae, Anagogini**

1501. *Selenia alciphearia* Wlk. (6817. *Selenia alciphearia* Wlk.) (Northern Selenia) – 25-IV-2001 1, 29-V-2002 1 and 29-V-2008 1.
1501. *Selenia alciphearia* Wlk. or 1502 *Selenia kentaria* (G. & R.) (6817. *Selenia alciphearia* or 6818 *Selenia kentaria* (G. & R.)) – 20A-V-2005 1.
1502. *Selenia kentaria* (G. & R.) (6818. *Selenia kentaria* (G. & R.)) (Kent's Geometer) – 29-V-2002 1 and 23C-V-2009 1.
1503. *Metanema inatomaria* Gn. (6819. *Metanema inatomaria* Gn.) (Pale Metanema) – 12-VI-2001 1, 23-VI-2002 1 and 24B-VI-2006 1.
1504. *Metanema determinata* Wlk. (6820. *Metanema determinata* Wlk.) (Dark Metanema) – 22-VI-2001 4, 24C-V-2006 1, 24A-VI-2006 1, 24B-VI-2006 1, 26B-VI-2007 1, 19B-VI-2008 1 and 12A-VI-2009 1.
1506. *Metarranthis duaria* (Gn.) (6822. *Metarranthis duaria* (Gn.)) (Ruddy Metarranthis) – 31-V-2001 1, 29-V-2002 1, 4-VI-2004 1, 20A-V-2005 1, 26A-V-2005 2, 24A-V-2006 1, 24B-V-2006 1, 24C-V-2006 1, 29-V-2008 5, 12A-VI-2009 1, 12B-VI-2009 1, 12C-VI-2009 1 and 4B-VI-2010 1.

1507. *Probola alienaria* H.-S. (6837. *Probola alienaria* H.-S.) – 22-VI-2001 1, 31-V-2001 2, 29-V-2002 1, 23-VI-2002 1, 4-VI-2004 2, 20A-V-2005 1, 24A-V-2006 2, 24B-V-2006 1, 24C-V-2006 1, 24B-VI-2006 1, 26B-VI-2007 1, 29-V-2008 1 and 19C-VI-2008 1.
1508. *Probola amicaria* H.-S. (6838. *Probola amicaria* (H.-S.)) (Friendly Probola) – 22-VI-2001 1, 4-VI-2004 1, 24C-V-2006 1, 24A-VI-2006 1, 23C-V-2009 1 and 12C-VI-2009 1.
1509. *Plagodis pulveraria* (L.) (6836. *Anagoga occiduaria* (Wlk.)) (American Barred Umber) – 7-VI-2001 1, 4-VI-2004 1, 24A-V-2006 1 and 23B-V-2009 1.
1510. *Plagodis phlogosaria* (Gn.) (6842. *Plagodis phlogosaria* (Gn.)) (Straight-lined Plagodis) – 29-VI-2002 1, 24B-V-2006 1, 24C-V-2006 1 and 12B-VI-2009 1.

### **Geometridae, Ennomiinae, Ourapterygini**

1522. *Sicya macularia* (Harr.) (6912. *Sicya macularia* (Harr.)) – 20B-VII-2003 1, 25-VII-2004 2, 13A-VII-2006 1, 13B-VII-2006 1 and 25C-VII-2007 1.
1524. *Synaxis jubilaria* (Hulst) (6954. *Synaxis jubilaria* (Hulst)) (October Thorn) – 17-IX-2001 1.
1528. *Tetracis crocallata* Gn. (6963. *Tetracis crocallata* Gn.) (White Slant-line) – 4-VI-2004 1, 20B-VI-2007 1 and 12B-VI-2009 1.
1531. *Prochoerodes lineola* (Göze) (6982. *Prochoerodes transversata* (Drury)) (Large Maple Spanworm) – 4-VIII-2001 1, 22-VIII-2001 2, 9A-IX-2002 2, 3A-VIII-2006 2, 3B-VIII-2006 1, 16C-VIII-2006 1, 10B-VIII-2008 1 and 10C-VIII-2008 1.

### **LASIOCAMPIDAE – Tent Caterpillar and Lappet Moths**

#### **Lasiocampidae, Lasiocampinae, Gastropachini**

1536. *Phyllodesma americana* (Harr.) (7687. *Phyllodesma americana* (Harr.)) (Lappet Moth) – 28-IV-2001 1, 29-V-2002 1, 29-V-2008 2 and 23B-V-2009 1.
1537. *Malacosoma disstria* Hbn. (7698. *Malacosoma disstria* Hbn.) (Forest Tent Caterpillar) – 15-VII-2001 1 and 24B-VI-2006 1. This species periodically occurs in outbreak numbers (Ives 1973).
1538. *Malacosoma californica* (Pack.) (7702. *Malacosoma californicum* (Pack.)) (Western Tent Caterpillar) – 15-VII-2001 2, 20A-VII-2003 1, 8A-VIII-2003 1, 25-VII-2004 2 and 13B-VII-2006 1.

### **SATURNIDAE – Large Silkworm Moths**

#### **Saturniidae, Saturniinae, Saturniini**

1542. *Antheraea polyphemus* (Cram.) (7757. *Antheraea polyphemus* (Cram.)) (Polyphemus Moth) – 22-VI-2001 1, 4-VI-2004 1 and 12C-VI-2009 1.

#### **Saturniidae, Saturniinae, Attacini**

1544. *Hyalophora gloveri* (Stkr.) (7769. *Hyalophora gloveri* (Stkr.)) (Glover's Silk Moth) – 15-V-2001 1, 29A-V-2003 1, 4-VI-2004 1 and 26A-V-2005 1.

### **SPHINGIDAE – Sphinx Moths**

#### **Sphingidae, Sphinginae, Sphingini**

1548. *Sphinx vashti* Stkr. (7803. *Sphinx vashti* Stkr.) (Vashti or Snowberry Sphinx) – 28-IV-2001 1, 22-VI-2001 2, 15-VII-2001 SR, 29-V-2002 1, 23-VI-2002 1 SR, 10B-VII-2003 1 SR, 4A-VI-2004 2 SR, 4B-VI-2004 2 SR, 20A-V-2005 1, 24C-VI-2006 2, 29-V-2008 1, 23A-V-2009 1, 23B-B-2009 1, 12A-VI-2009 1, 12C-VI-2009 1, 4A-VI-2010 1 and 4B-VI-2010 1.

#### **Sphingidae, Smerinthinae, Smerinthini**

1553. *Smerinthus jamaicensis* (Drury) (7821. *Smerinthus jamaicensis* (Drury)) (Twin-spotted Sphinx) – 7-VI-2001 1, 22-VI-2001 SR, 5 VII 2001 SR, 23-VI-2002 2 SR, 15-VII-2001 SR, 4A-VI-2004 3 SR, 4B-VI-2004 2 SR, 18-VI-2004 1, 20A-V-2005 1, 24A-V-2006 1, 24C-V-2006 1, 24C-VI-2006 1, 13A-VII-2006 1, 19A-VI-2008 1 and 19B-VI-2008 1.
1554. *Smerinthus cerisyi* Kby. (7822. *Smerinthus cerisyi* Kby.) (One-eyed Sphinx) – 31-V-2001 1, 22-VI-2001 SR, 5-VII-2001 SR, 29-V-2002 1, 23-VI-2002 1 SR, 10A-VII-2003 1 SR, 10B-VII-2003 1 SR, 4A-VI-2004 2 SR, 4B-VI-2004 3 SR, 18-VI-2004 1, 24C-V-2006 1, 26B-VI-2007 2, 26C-VI-2007 2 and 26D-VI-2007 2, 29-V-2008 1, 12A-VI-2009 1, 12B-VI-2009 1, 4A-VI-2010 1, 4B-VI-2010 1 and 4C-VI-2010 1.
1556. *Paonias exaecatus* (J.E. Sm.) (7824. *Paonias exaecatus* (J.E. Smith)) (Blinded Sphinx) – 7-VI-2001 1, 15-VII-2001 1, 26C-VI-2007 1, 26D-VI-2007 2 and 12B-VI-2009 1.
1557. *Paonias myops* (J.E. Sm.) (7825. *Paonias myops* (J.E. Smith)) (Small-eyed Sphinx) – 22-VI-2001 1 and 23-VI-2002 1.
1558. *Pachysphinx modesta* (Harr.) (7828. *Pachysphinx modesta* (Harr.)) (Big Poplar Sphinx) – 22-VI-2001 1, 31-V-2001 1, 23-VI-2002 1 SR, 29B-VI-2003 1, 4A-VI-2004 1 (2 SR), 4B-VI-2004 1 SR, 26B-VI-2007 1, 19A-VI-2008 1 and 10B-VIII-2008 1.

#### **Sphingidae, Macroglossinae, Macroglossini**

1570. *Hyles gallii* (Rott.) (7893. *Hyles gallii* (Rottemburg)) (Bedstraw Hawkmoth) – 29A-VI-2003 1, 4-VI-2004 1, 20A-V-2005 1 and 24C-VI-2006 1.
1571. *Hyles lineata* (F.) (7894. *Hyles lineata* (F.)) (White-lined Sphinx) – 30-VIII-2001 1.

#### **NOTODONTIDAE – Prominent Moths**

##### **Notodontidae, Pygaerinae**

1572. *Closteria albosigma* Fitch (7895. *Closteria albosigma* Fitch) (Sigmoid Prominent) – 25-IV-2001 1, 28-IV-2001 1, 23-VI-2001 1, 15-VII-2001 1, 4-VIII-2001 2, 29-V-2002 1, 23 VI-2002 1 SR, 4-VI-2004 1, 23B-V-2009 1 and 12B-VI-2009 1.
1573. *Closteria strigosa* (Grt.) (7898. *Closteria strigosa* (Grt.)) (Striped Chocolate-tip) – 26C-VI-2007 1.
1574. *Closteria brucei* (Hy. Edw.) (7900. *Closteria brucei* (Hy. Edw.)) (Bruce's Chocolate-tip) – 23-VI-2002 1 SR, 12A-VI-2003 1, 4-VI-2004 1 and 24C-V-2006 1.
1575. *Closteria apicalis* (Wlk.) (7901. *Closteria apicalis* (Wlk.)) (Common Chocolate-tip or Red-marked Tentmaker) – 15-V-2001 1, 31-V-2001 1, 7-VI-2001 1, 29-V-2002 1, 4-VI-2004 1, 20A-V-2005 1, 26A-V-2005 1, 13A-V-2006 1, 29-V-2008 1, 212A-VI-2009 1, 12B-VI-2009 1, 12C-VI-2009 1 and 4B-VI-2010 1.

##### **Notodontidae, Notodontinae, Notodontini**

1576. *Pheosia rimosa* Pack.) (7922. *Pheosia rimosa* Pack.) (Black-rimmed Prominent) – 22-VI-2001 1, 15-VII-2001 1, 29-V-2002 1, 25-VII-2004 1, 20A-V-2005 1, 24A-V-2006 1, 24B-V-2006 1, 13A-VII-2006 1, 29-V-2008 1 and 4C-VI-2010 1.
1577. *Odontosia elegans* (Stkr.) (7924. *Odontosia elegans* (Stkr.)) (Elegant Prominent) – 22-VI-2001 2 and 19A-VI-2008 1.
1579. *Notodonta torva* (Hbn.) (7928. *Notodonta simplaria* Graef.) (Simple Prominent) – 15-V-2001 1, 29-V-2002 3, 20A-V-2005 2, 13B-V-2006 1 and 3B-VIII-2006 1.

#### **Notodontidae, Notodontinae, Dicranurini**

1580. *Gluphisia septentrionis* Wlk.) (7931. *Gluphisia septentrionis* Wlk.) (Small Pebble or Common Gluphisia) – 22-VI-2001 1, 15-VII-2001 1, 23-VI-2002 5 SR, 29A-VI-2003 1, 29B-VI-2003 1, 10B-VII-2003 1, 4-VI-2004 1, 24A-VI-2006 1, 24B-VI-2006 1 and 12C-VI-2009 1.
1582. *Gluphisia lintneri* (Grt.) (7934. *Gluphisia lintneri* (Grt.)) (Lintner's Pebble) – 25-IV-2001 1 and 28-IV-2001 1.
1586. *Furcula scolopendrina* (Bdv.) (7940. *Furcula scolopendrina* (Bdv.)) (Poplar Kitten) – 24B-VI-2006 1.
1587. *Furcula modesta* (Huds.) (7941. *Furcula modesta* (Huds.)) (Modest Kitten) – 29-V-2002 1, 3A-VIII-2006 1, 12B-V-2009 1 and 12A-VI-2009 1.

#### **Notodontidae, Phalerinae**

1589. *Nadata gibbosa* (J.E. Sm.) (7915. *Nadata gibbosa* (J.E. Smith)) (White-dotted Prominent) – 22-VI-2001 2, 23-VI-2002 1, 4A-VI-2004 1 (4 SR), 24B-V-2006 1, 24A-VI-2006 1, 24B-VI-2006 1, 26B-VI-2007 1 and 26C-VI-2007 1.

#### **Notodontidae, Heterocampinae**

1591. *Schizura unicornis* (J.E. Sm.) (8007. *Schizura unicornis* (J.E. Smith)) (Variegated Prominent or Unicorn Caterpillar Moth) – 23-VI-2002 1, 25-VII-2004 1, 24B-VI-2006 1 and 12C-VI-2009 1.

### **EREVIDAE – Quadrifine Noctuoids**

#### **Erebidae, Lymantriinae, Orgyiini**

1600. *Dasychira vagans* (B. & McD.) (8294. *Dasychira vagans* (B. & McD.)) (Variable Tussock Moth) – 15-VII-2001 1, 17-VIII-2002 1, 25-VII-2004 1, 24B-VI-2006 1, 26D-VI-2007 1 and 10C-VIII-2008 1.

#### **Erebidae, Arctiinae, Lithosiini**

1606. *Hypoprepia miniata* (Kby.) (8089. *Hypoprepia miniata* (Kby.)) (Scarlet-winged Lichen Moth) – 15-VII-2001 2 and 25-VII-2004 1.
1608. *Clemensia albata* Pack. (8098. *Clemensia albata* Pack.) (Little White Lichen Moth) – 25D-VII-2007 1.
1609. *Eilema bicolor* (Grt.) (8043. *Eilema bicolor* (Grt.)) (Bicolored Moth) – 25-VII-2004 1.

1610. *Crambidia casta* (Pack.) (8051. *Crambidia casta* (Pack.)) (Pearly-winged Lichen Moth) – 22-VIII-2001 6, 9A-IX-2002 1, 20B-VII-2003 1, 8A-VIII-2003 2, 8B-VIII-2003 1, 30A-VIII-2003 1, 30-VIII-2004 1 and 10A-VIII-2008 1.

### **Erebidae, Arctiinae, Arctiini**

1613. *Virbia ferruginosa* (Wlk.) (8123. *Holomelina ferruginosa* (Wlk.)) (Rusty Holomelina) – 15-VII-2001 1, 4-VIII-2001 1, 27-VII-2002 1, 17-VIII-2002 1, 25-VII-2004 1, 24B-VI-2006 1 and 13A-VII-2006 1.

1619. *Grammia virgo* (L.) (8197. *Grammia virgo* (L.)) (Virgin Tiger Moth) – 22-VI-2001 1, 5-VII-2001 2, 15-VII-2001 1, 29A-VI-2003 2, 29B-VI-2003 1, 25-VII-2004 1, 24A-VI-2006 1, 24B-VI-2006 1, 24C-VI-2006 1 and 26C-VI-2007 1.

1620. *Grammia parthenice* (W. Kby.) (8196. *Grammia parthenice* (W. Kby.)) (Parthenice Tiger Moth) – 15-VII-2001 3, 4-VIII-2001 1, 22-VIII-2001 1, 27-VII-2002 1, 17-VIII-2002 2, 27B-VII-2003 1, 8B-VIII-2003 1, 25-VII-2004 2, 13B-VII-2006 1, 25B-VII-2007 1, 10A-VIII-2008 1 and 10B-VIII-2008 1.

1621. *Grammia virguncula* (W. Kby.) (8175. *Grammia virguncula* (W. Kby.)) (Little Virgin Moth) – 22-VI-2001 1, 15-VII-2001 2, 10A-VII-2003 1, 10B-VII-2003 1 and 25-VII-2004 1.

1625. *Grammia williamsii* (Dodge) (8186. *Grammia williamsii* (Dodge)) (William's Tiger Moth) – 22-VI-2001 1, 23-VI-2002 2, 29A-VI-2003 1, 29B-VI-2003 1, 4-VI-2004 1, 26C-VI-2007 1 and 12A-VI-2009 1.

1631. *Platarctia parthenos* (Harr.) (8162. *Platarctia parthenos* (Harr.)) (St. Lawrence Tiger Moth) – 23-VI-2002 40 SR, 27-VII-2002 10 SR, 4A-VI-2004 1 (3 SR), 18-VI-2004 1 (2 SR), 24C-V-2006 1, 24B0VI-2006 1 and 24C-VI-2006 1.

1632. *Arctia caja* (L.) (8166. *Arctia caja* (L.)) (Great Tiger Moth) – 15-VII-2001 1, 4-VIII-2001 1, 27-VII-2002 1, 25-VII-2004 2, 13A-VII-2006 1, 25B-VII-2007 2, 25D-VII-2007 1, 10A-VIII-2008 1 and 10B-VIII-2008 1.

1635. *Phragmatobia assimilans* Wlk. (8158. *Phragmatobia assimilans* Wlk.) (Large Ruby Tiger Moth) – 31-V-2001 1, 29-V-2002 1, 29A-V-2003 1, 29B-V-2003 1, 4-VI-2004 2, 29-V-2008 2, 12A-V-2009 1, 12B-V-2009 1, 12C-V-2009 1 and 4B-VI-2010 1.

1636. *Pyrrharctia isabella* (J.E. Sm.) (8129. *Pyrrharctia isabella* (J.E. Smith)) (Isabella Tiger Moth) – 22-VI-2001 1, 23-VI-2002 1 and 19B-VI-2008 1.

1637. *Estigmene acraea* (Drury) (8131. *Estigmene acraea* (Drury)) (Salt Marsh Moth) – 24B-V-2006 1 and 26C-VI-2007 1.

1639. *Spilosoma congrua* (Wlk.) (8134. *Hyphantria congrua* (Wlk.)) – 22-VI-2001 1, 23-VI-2002 2, 29B-VI-2003 1, 4-VI-2004 1 and 26C-VI-2007 1.

1647. *Haploa lecontei* (Guér.-Méneville) (8111. *Haploa lecontei* (Guér.-Méneville)) (Leconte's Haploa) – 15-VII-2001 1.

1649. *Lophocampa maculata* (Harr.) (8214. *Lophocampa maculata* Harr.)) (Spotted Tussock Moth) – 15-VII-2001 1, 24B-V-2006 1 and 24B-VI-2006 1.

1652. *Ctenucha virginica* (Esp.) (8262. *Ctenucha virginica* (Esp.)) (Virginia Ctenucha) – 22-VI-2001 1 and 23-VI-2002 1.

### **Erebidae, Herminiinae**

1654. *Idia americalis* (Gn.) (8322. *Idia americalis* (Gn.)) (American Snout Moth) – 22-VI-2001 3, 15-VII-2001 2, 4-VIII-2001 1, 27-VII-2002 1, 17-VIII-2002 3, 9A-IX-2002 1, 8B-VIII-2003 1, 25-VII-2004 1, 30-VIII-2004 1, 24B-VI-2006 1, 13A-VII-2006 1, 13B-VII-2006 1, 3A-VIII-

- 2006 1, 3B-VIII-2006 1, 26B-VI-2007 1, 26C-VI-2007 1, 10A-VIII-2008 1 and 10B-VIII-2008 1.
1655. *Idia aemula* Hbn. (8323. *Idia aemula* Hbn.) (Powdered Snout) – 25-VII-2004 1.
1662. *Zanclognatha latalba* (Sm.) (8354. *Zanclognatha latalba* (Sm.)) (The Canadian Zanclognatha) – 15-VII-2001 1 and 10B-VIII-2008 1.
1663. *Chytolita petrealis* Grt.) (8356. *Chytolita petrealis* Grt.) – 15-VII-2001 1, 29B-VI-2003 1 and 12B-VI-2009 1.
1664. *Hormisa bivittata* (Grt.) (8359. *Macrochilo bivittata* (Grt.)) – 15-VII-2001 3 and 25-VII-2004 1.
1666. *Phalaenostola metonalis* (Wlk.) (8362. *Phalaenostola metonalis* (Wlk.)) (Pale Phalaenostola or Tufted Snout) – 15-VII-2001 2, 24C-VI-2006 2, 13A-VII-2006 1 and 26C-VI-2007 1.
1668. *Bleptina caradrinalis* Gn. (8370. *Bleptina caradrinalis* Gn.) (Variable Snout Moth or Bent-winged Owlet) – 24B-VI-2006 1.
1669. *Palthis angulalis* (Hbn.) (8397. *Palthis angulalis* (Hbn.)) (Angulated Snout Moth or Dark-spotted Palthis) – 22-VI-2001 2, 24B-VI-2006 1 and 26A-VI-2007 1.

#### **Erebidae, Rivulinae**

1671. *Rivula propinqualis* Gn. (8404. *Rivula propinqualis* Gn.) (Yellow Snout Moth) – 13A-VII-2006 2.

#### **Erebidae, Hypeninae**

1676. *Hypena edictalis* (Wlk.) 8452. *Bomolocha edictalis* (Wlk.) (Large Bomolocha) – 15-VII-2001 1, 13A-VII-2006 2, 13B-VII-2006 1, 10A-VIII-2008 1 and 10B-VIII-2008 1.

#### **Erebidae, Boletobiinae**

1683. *Mycterophora inexplicata* (Wlk.) (8413. *Mycterophora inexplicata* (Wlk.)) (Pale-edged Snout Moth) – 13A-VII-2006 1.

#### **Erebidae, Erebinae, Melipotini**

1694. *Drasteria hudsonica* (G. & R.) (8632. *Drasteria hudsonica* (G. & R.)) – 29A-VI-2003 1.

#### **Erebidae, Erebinae, Eucliniini**

1700. *Caenurgina crassiuscula* (Haw.) (8738. *Caenurgina crassiuscula* (Haw.)) (Clover Looper Moth) – 4-VIII-2001 1, 15-IX-2001 1, 24-IX-2001 1, 23-VI-2002 1, 27-VII-2002 1, 12A-VI-2003 1, 29B-VI-2003 1, 4-VI-2004 2, 25-VII-2004 2, 13A-VII-2006 1, 26A-V-2007 1 and 12C-VI-2009 1.
1701. *Caenurgina erechtea* (Cram.) (8739. *Caenurgina erechtea* (Cram.)) (Forage Looper Moth) – 27-VII-2002 1 and 3A-VIII-2006 1.

#### **Erebidae, Erebinae, Ophiusini**

1703. *Zale minerea* (Gn.) (8697. *Zale minerea* (Gn.)) (Colorful Zale) – 29-V-2002 5, 20A-V-2005 2, 24A-V-2006 1, 24B-V-2006 1, 29-V-2008 2, 23A-V-2009 1 and 23B-V-2009 1.

### **Erebidae, Erebinae, Catocalini**

1705. *Catocala relicta* Wlk. (8803. *Catocala relicta* Wlk.) (White Underwing) – 4-VIII-2001 1, 17-VIII-2002 2, 3B-VIII-2006 1, 16C-VIII-2006 1 and 10B-VIII-2008 4.
1706. *Catocala unijuga* Wlk. (8805. *Catocala unijuga* Wlk.) (Once-married Underwing) – 4-VIII-2001 7, 27-VII-2002 1, 17-VIII-2002 1, 10A-VIII-2008 3 and 10B-VIII-2008 4.
1711. *Catocala briseis* Edw. (8817. *Catocala briseis* Edw.) (Ribbed or Briseis Underwing) – 17-VIII-2002 1, 9B-IX-2002 1, 3B-VIII-2006 1, 3C-VIII-2006 2, 10B-VIII-2008 2 and 10C-VIII-2008 1.
1713. *Catocala semirelicta* Grt. (8821. *Catocala semirelicta* Grt.) (Semirelict Underwing) – 17-VIII-2001 122-VIII-2001 1, 27-VII-2002 2, 8A-VIII-2003 1, 26A-VIII-2003 1, 16C-VIII-2006 1 and 10A-VIII-2008 1.
1719. *Catocala blandula* Hulst (8867. *Catocala blandula* Hulst) (Charming Underwing) – 3B-VIII-2006 1 and 10B-VIII-2008 1.

### **NOLIDAE**

#### **Nolidae, Nolinae**

1721. *Nola cilicoides* (Grt.) (8990. *Nola cilicoides* (Grt.)) (Blurry-patched Nola) – 15-VII-2001 4, 27-VII-2002 1, 17-VIII-2002 2, 27B-VII-2003 1 and 10A-VIII-2008 1.

### **NOCTUIDAE – Noctuid Moths**

#### **Noctuidae, Plusiinae, Abrastolini**

1725. *Abrastola urentis* Gn. (8881. *Abrostola urentis* Gn.) (Variegated Brindle) – 24A-VI-2006 1 and 13A-VII-2006 1.

#### **Noctuidae, Plusiinae, Argyrogrammatini**

1726. *Trichoplusia ni* (Hbn.) (8887. *Trichoplusia ni* (Hbn.)) (Cabbage Looper Moth) – 17-IX-2001 1.

#### **Noctuidae, Plusiinae, Plusiini**

1727. *Diachrysia aeroides* (Grt.) (8896. *Diachrysia aeroides* (Grt.)) (Dark-spotted Looper Moth) – 15-VII-2001 1, 22-VII-2002 1 and 25-VII-2004 1.
1729. *Pseudeva purpurigera* (Wlk.) (8899. *Pseudeva purpurigera* (Wlk.)) – (Straight-lined Looper Moth) – 13A-VII-2006 1, 3C-VIII-2006 1, 10B-VIII-2008 1 and 10C-VIII-2008 1.
1733. *Eosphoropteryx thyatyroides* (Gn.) (8905. *Eosphoropteryx thyatyroides* (Gn.)) (Pink-patched Looper or Pink-patched Beauty) – 10B-VIII-2008 1.
1737. *Autographa bimaculata* (Steph.) (8911. *Autographa bimaculata* (Steph.)) (Two-spotted Looper Moth) – 15-VII-2001 1, 13A-VII-2006 2 and 10B-VIII-2008 1.
1740. *Autographa californica* (Spey.) (8914. *Autographa californica* (Speyer)) (Alfalfa Looper Moth) – 15-VII-2001 1 and 24-IX-2001 1.
1741. *Autographa flagellum* (Wlk.) (8916. *Autographa flagellum* (Wlk.)) – 24B-VI-2006 1.
1744. *Autographa ampla* (Wlk.) (8923. *Autographa ampla* (Wlk.)) – 20B-VII-2003 1, 24B-VI-2006 1 and 24C-VI-2006 1.

1745. *Anagrapha falcifera* (Kby.) (8924. *Anagrapha falcifera* (Kby.)) – 12A-VI-2003 1, 12B-VI-2003 1, 8A-VIII-2003 1, 19A-VI-2005 1, 26D-VI-2007 1, 29-V-2008 1 and 12A-VI-2009 1.
1763. *Plusia putnami* Grt. (8950. *Plusia putnami* Grt.) (Putnam's Looper Moth) – 20-VII-2004 1, 24A-VI-2006 1, 24B-VI-2006 1 and 13A-VII-2006 1.
1765. *Plusia venusta* Wlk. (8953. *Plusia venusta* Wlk.) (White-streaked Looper Moth) – 13A-VII-2006 1, 13B-VII-2006 2, 10B-VIII-2008 1 and 10C-VIII-2008 1.

#### Noctuidae, Eustrotiinae

1767. *Protodeltote albidula* (Gn.) (9048. *Lithacodia albidula* (Gn.)) (Common Midget) – 22-VI-2001 3, 23-VI-2002 1, 13A-VII-2006 1, 26A-VI-2007 1, 26C-VI-2007 1, 26D-VI-2007 1, 19A-VI-2008 1 and 12C-VI-2009 1.

#### Noctuidae, Acontiinae, Acontiini

1768. *Ponometia semiflava* (Gn.) (9085. *Tarachidia semiflava* (Gn.)) – 20A-VII-2003 1, 31-V-2005 1 and 19A-VI-2005 2.
1773. *Tarache angustipennis* (Grt.) (9111. *Therasea angustipennis* (Grt.) and 9112. *Therasea flavidota* (Sm.)) (Narrow-winged Midget) – 4-VI-2004 1.

#### Noctuidae, Dilobinae

1778. *Raphia frater* Grt. (9193. *Raphia frater* Grt.) (The Brother) – 22-VI-2001 1, 15-VII-2001 1, 23-VI-2002 15 SR, 29A-VI-2003 1, 4-VI-2004 1, 24B-VI-2006 1 and 12C-VI-2009 1.

#### Noctuidae, Acronictinae

1787. *Acronicta grisea* (Wlk.) (9212. *Acronicta grisea* (Wlk.)) (Gray Dagger Moth) – 24B-V-2006 1, 24C-VI-2006 1, 12B-VI-2009 1 and 12C-VI-2009 1.
1790. *Acronicta superans* Gn. (9226. *Acronicta superans* Gn.) (The Chieftain Dagger Moth) – 22-VI-2001 1, 23-VI-2002 2 and 12C-VI-2009 1.
1791. *Acronicta hasta* Gn. (9228. *Acronicta furcifera* Gn., 9229. *Acronicta hasta* Gn.) (The Forked Dagger Moth) – 24B-VI-2006 1 and 26B-VI-2007 1.
1793. *Acronicta fragilis* (Gn.) (9241. *Acronicta fragilis* (Gn.)) (Fragile Dagger Moth) – 31-V-2001 1, 24C-V-2006 1 and 12B-VI-2009 1.
1794. *Acronicta impleta* Wlk. (9257. *Acronicta impleta* Wlk.) (Yellow-haired Dagger Moth) – 29-V-2002 1 and 23B-V-2009 1.
1796. *Acronicta impressa* Wlk. (9261. *Acronicta impressa* Wlk.) (Willow Dagger Moth) – 24A-V-2006 1, 13A-VII-2006 1 and 3B-VIII-2006 1.
1798. *Acronicta oblinita* (J.E. Sm.) (9272. *Acronicta oblinita* (J.E. Smith)) (Smeared Dagger Moth) – 31-V-2001 1 and 4-VI-2004 3.
1801. *Simyra insularis* (H.-S.) (9280. *Simyra henrici* (Grt.)) (Henry's Marsh Moth) – 26B-VI-2007 1, 19A-VI-2008 1 and 23B-V-2009 1.

#### Noctuidae, Cuculliinae

1808. *Cucullia intermedia* Spey. (10194. *Cucullia intermedia* Speyer) (Intermediate Falconer or Goldenrod Cutworm) – 31-V-2001 1, 10B-VII-2003 1, 24A-V-2006 2, 24B-V-2006 1, 24C-V-2006 1, 24B-VI-2006 1, 23A-V-2009 1 and 4C-VI-2010 1.

### Noctuidae, Oncocnemidinae

1832. *Sympistis saundersiana* Grt. (10099. *Oncocnemis saundersiana* Grt.) (Saunderson's Beauty) – 22-VIII-2001 1, 9B-IX-2002 1. This is the first collection of this species for Alberta. It is reported from southern and eastern Ontario by Rockburne and Lafontaine (1976) where it was reared on beardtongue (*Penstemon*), and from Ohio by Rings et al. (1992). *Penstemon gracilis* occurs in the study area. It is a species that does not respond well to grazing.
1835. *Sympistis viriditincta* (Sm.) (10108. *Oncocnemis viriditincta* Sm.) – 22-VIII-2001 1 and 30-VIII-2001 1.
1836. *Sympistis stabilis* Sm. (10062. *Homohadena stabilis* Sm.) (Brown Sallow) – 1-VII-2001 1, 15-VII-2001 1, 4-VIII-2001 1, 27A-VII-2003 2, 25-VII-2004 2, 24B-VI-2006 1, 13B-VII-2006 1 and 25D-VII-2007 1.
1838. *Sympistis dinalda* (Sm.) (10065. *Homohadena infixa* (Wlk.)) (Broad-lined Sallow) – 27A-VII-2003 1, 24B-VI-2006 1 and 13A-VII-2006 1.
1843. *Sympistis poliochroa* (Hamp.) (10140. *Oncocnemis poliochroa* Grt.) – 8A-VIII-2003 1.
1844. *Sympistis mackiei* (B. & Benj.) (10143. *Oncocnemis mackiei* (B. & Benj.)) (Mackie's Beauty) – 22-VIII-2001 1.
1853. *Sympistis chionanthi* (Sm.) (10067. *Adita chionanthi* (J.E. Smith)) (Fringed Tree Sallow) – 22-VIII-2001 1, 17-VIII-2002 1, 20B-VII-2003 1 and 8A-VIII-2003 1.

### Noctuidae, Heliothinae

1877. *Heliothis ononis* (F.) (11077. *Heliothis ononis* (F.)) – 29A-VI-2003 1.
1884. *Schinia florida* (Gn.) (11164. *Schinia florida* (Gn.)) – 10B-VII-2003 1.
1892. *Schinia cumatilis* (Grt.) (11192. *Schinia cumatilis* (Grt.)) (Silver-banded Gem) – 15-VII-2001 1, 27B-VII-2003 2 and 25-VII-2004 1.

### Noctuidae, Noctuinae, Pseuostrotiini

1897. *Pseudostrotia carneola* (Gn.) (9053. *Pseudostrotia carneola* (Gn.)) (Pink-barred Lithacodia) – 10B-VIII-2008 1.

### Noctuidae, Noctuinae, Caradrini

1905. *Caradrina montana* (Bremer) (9656. *Platyperigea extima* (Wlk.)) (Civil Rustic) – 4-VIII-2001 1, 17-IX-2001 1, 24-IX-2001 1, 27-VII-2002 4 SR, 17-VIII-2002 2, 9A-IX-2002 1, 9B-IX-2002 18A-VIII-2003 1 SR, 8B-VIII-2003 1 SR, 30B-VIII-2003 1 SR, 30W-VIII-2004 2 SR and 30M-VIII-2004 2 SR.
1906. *Proxenus miranda* (Grt.) (9647. *Proxenus miranda* (Grt.)) (Glistening Rustic) – 22-VI-2001 2, 23-VI-2002 3, 19A-VI-2005 2, 24C-V-2006 1, 24A-VI-2006 1, 24C-VI-2006 2, 28-VI-2006 1, 26C-VI-2007 1, 26D-VI-2007 2, 19C-VI-2008 1, 12A-VI-2009 1, 12B-VI-2009 1 and 12C-VI-2009 1.

### Noctuidae, Noctuinae, Phlogophorini

1909. *Euplexia benesimilis* McD. (9545. *Euplexia benesimilis* McD.) (American Angle Shades) – 24C-V-2006 1.

### Noctuidae, Noctuinae, Apameini

1912. *Apamea vultuosa* (Grt.) (9341. *Apamea vultuosa* (Grt.)) (Narrow-bordered Quaker or Airy Quaker) – 24B-VI-2006 1.
1914. *Apamea alia* (Gn.) (9351. *Apamea alia* (Gn.)) (Dewy Quaker) – 24B-VI-2006 1, 24C-VI-2006 1 and 13A-VII-2006 1.
1915. *Apamea indocilis* (Wlk.) (9362. *Apamea indocilis* (Wlk.)) (Ignorant Apamea) – 24C-VI-2006 1.
1918. *Apamea sordens* (Hufn. (9364. *Apamea finitima* Gn.) (Bordered Apamea) – 7-VI-2001 4, 4-VI-2004 2, 19A-VI-2005 1, 24A-V-2006 1, 24C-V-2006 1 and 12B-VI-2009 1.
1924. *Apamea commoda* (Wlk.) (9359. *Apamea commoda* (Wlk.)) (Southern Quaker) – 5-VII-2001 2, 15-VII-2001 2, 25-VII-2004 1, 13A-VII-2006 1, 12B-VI-2009 1 and 12C-VI-2009 1.
1927. *Apamea amputatrix* (Fitch) (9348. *Apamea amputatrix* (Fitch)) (Northern Quaker or Dusky Sallow) – 22-VI-2001 1, 27A-VII-2003 1 and 25-VII-2004 1.
1930. *Apamea scoparia* Mik., Must. & Laf. (9365. *Agroperina lateritia* (Hufn.)) (Red-winged Quaker) – 5-VII-2001 1 and 15-VII-2001 1.
1931. *Apamea cogitata* (Sm.) (9367a. *Agroperina dubitans cogitata* (Sm.)) (Ruby Quaker) – 15-VII-2001 1, 22-VIII-2001 1, 13A-VII-2006 1, 25B-VII-2007 1 and 10B-VIII-2008 1.
1932. *Apamea inficita* (Wlk.) (9369. *Apamea inficita* (Wlk.)) (Inficita Quaker) – 15-VII-2001 4, 4-VIII-2001 3, 17-VIII-2002 1, 27-VIII-2002 1, 25-VII-2004 1, 13A-VII-2006 1, 13B-VII-2006 1, 3A-VIII-2006 1, 16B-VIII-2006 1, 25B-VII-2007 1, 25D-VII-2007 1 and 10B-VIII-2008 1.
1933. *Apamea devastator* (Brace) (9382. *Crymodes devastator* (Brace)) (Destructive Quaker or Glassy Cutworm Moth) – 4-VIII-2001 1, 30-VIII-2001 1, 17-IX-2001 1, 27-VII-2002 4, 17-VIII-2002 1, 9A-IX-2002 2, 8B-VIII-2003 1, 25-VII-2004 2, 30-VIII-2004 1 and 13B-VII-2006 1.
1936. *Apamea niveivenosa* (Grt.) (9374. *Apamea niveivenosa* (Grt.)) (White-veined Quaker) – 15-VII-2001 2 and 17-VIII-2002 1.
1939. *Eremobina claudens* (Wlk.) (9396. *Eremobina claudens* (Wlk.)) (Alberta Quaker) – 28-VIII-2001 1, 9A-IX-2002 1, 16B-VIII-2006 1 and 16C-VIII-2006 1.
1943. *Oligia egens* (Wlk.) (9417. *Oligia egens* (Wlk.)) (Neomogen's Quaker) – 22-VIII-2001 1, 9B-IX-2002 1, 25B-VII-2007 1 and 25D-VII-2007 1.
1944. *Oligia mactata* (Gn.) (9419. *Oligia mactata* (Gn.)) (Prairie Quaker) – 22-VIII-2001 5, 30-VIII-2001 1 and 9A-IX-2002 1.
1945. *Oligia illocata* (Wlk.) (9420. *Oligia illocata* (Wlk.)) (Wandering Quaker) – 22-VIII-2001 1 and 24-IX-2001 1.
1946. *Neoligia subjuncta* (Sm.) (9412.1. *Oligia laevigata* (Sm.)) (Short-cloaked Quaker) – 15-VII-2001 1, 17-VIII-2002 1, 25-VII-2004 1, 13A-VII-2006 1 and 10A-VIII-2008 1.
1950. *Photedes includens* (Wlk.) (9434. *Spartiniphaga includens* (Wlk.)) (Silver-C Borer) – 17-VIII-2002 2, 27B-VII-2003 2 and 3B-VIII-2006 1.
1954. *Hypocoena inquinata* (Gn.) (9437. *Chortodes inquinata* (Gn.)) (Sordid Wainscot) – 27-VII-2002 1, 17-VIII-2002 1 and 25-VII-2004 1.
1956. *Hypocoena rufostrigata* (Pack.) (9440. *Chortodes rufostrigata* (Pack.)) (Brown-streaked Rustic) – 22-VIII-2001 1, 27-VII-2002 1, 25-VII-2004 1 and 24C-VI-2006 1.
- 1957 "Photedes" *defecta* (Grt.) (9443. *Chortodes defecta* (Grt.)) (Narrow-winged Borer) – 25-VII-2004 1.
1959. *Capsula subflava* (Grt.) (9450. *Archana subflava* (Grt.)) (Subflava Sedge Borer) – 9A-IX-2002 1, 25C-VII-2007 1, 10A-VIII-2008 1 and 10B-VIII-2008 1.

1960. *Helotropha reniformis* (Grt.) (9453. *Celaena reniformis* (Grt.)) (Kidney-spotted Rustic) – 24-IX-2001 1 and 17-VIII-2002 1.
1961. *Amphipoea interoceanica* (Sm.) (9456. *Amphipoea interoceanica* (Sm.)) – 4-VIII-2001 1.
1962. *Amphipoea americana* (Spey.) (9457. *Amphipoea americana* (Speyer)) (American Ear Moth) – 4-VIII-2001 4, 22-VIII-2001 3, 17-IX-2001 1, 24-IX-2001 1, 9A-IX-2002 1, 9B-IX-2002 1, 30-VIII-2004 1, 3A-VIII-2006 1, 3B-VIII-2006 1, 3C-VIII-2006 1, 16B-VIII-2006 1, 16C-VIII-2006 1, 10A-VIII-2008 1, 10B-VIII-2008 1 and 10C-VIII-2008 1. Can be mistaken for A. interoceanica.
1963. *Papaipema harrisii* (Grt.) (9472. *Papaipema harrisii* (Grt.)) (Cow Parsnip Borer Moth) – 16C-VIII-2006 1.
1968. *Hydraecia perobliqua* Hamp. (9515. *Hydraecia perobliqua* Hamp.) (Oblique Rustic) – 22-VIII-2001 1, 30-VIII-2001 2, 17-IX-2001 2, 26-VIII-2002 1 and 11-IX-2002 2.

#### Noctuidae, Noctuinae, Arzamini

1971. *Bellura obliqua* (Wlk.) (9525. *Bellura obliqua* (Wlk.)) (Cattail Borer Moth) – 7-VI-2001 2, 22-VI-2001 3, 15-VII-2001 1, 23-VI-2002 1, 26C-VI-2007 1, 12A-VI-2009 1 and 12C-VI-2009 1.

#### Noctuidae, Noctuinae, Xylenini

1972. *Hyppa contrasta* McD. (9579. *Hyppa contrasta* McD.) (Common Hyppa or Cranberry Cutworm) – 24A-V-2006 1, 24B-VI-2006 1 and 12B-VI-2009 1.
1976. *Xylena curvimacula* (Morr.) (9874. *Xylena curvimacula* (Morr.)) (Dot and Dash Swordgrass Moth) – 25-IV-2001 2, 28-IV-2001 (EM), 17-IX-2001 1, 24-IX-2001 1 and 10-V-2002 2.
1977. *Xylena thoracica* (Put.-Cram.) (9875. *Xylena thoracica* (Putnam-Cramer)) (Gray Swordgrass Moth) – 10-V-2002 1 and 13A-V-2006 1.
1978. *Xylena cineritia* (Grt.) (9876. *Xylena cineritia* (Grt.)) (Western Swordgrass Moth) – 25-IV-2001 4, 28-IV-2001 1, 28-IV-2001 (EM) and 10-V-2002 1.
1980. *Lithomoia germana* (Morr.) (9878. *Lithomoia germana* (Morr.)) (American Peasant) – 16C-VIII-2006 1.
1981. *Homoglaea hircina* Morr. (9881. *Homoglaea hircina* Morr.) (Goat Sallow) – 25-IV-2001 4, 28-IV-2001 4 and 10-V-2002 2.
1983. *Litholomia napaea* (Morr.) (9884. *Litholomia napaea* (Morr.)) (Dark Gray Peasant) – 25-IV-2001 6, 28-IV-2001 1, 15-V-2001 1, 30-VIII-2001 2, 17-IX-2001 2, 24-IX-2001 2, 10-V-2002 2, 19-V-2002 1, 30A-VIII-2003 1 and 20A-V-2005 1 and 23C-V-2009 1.
1984. *Lithophane innominata* (Sm.) (9888. *Lithophane innominata* (Sm.)) (Nameless Pinion) – 28-IV-2001 1.
1996. *Eupsilia tristigmata* (Grt.) (9935. *Eupsilia tristigmata* (Grt.)) (Three-spotted Sallow) – 10-V-2002 1.
1999. *Eucirroedia pampina* (Gn.) (9952. *Eucirroedia pampina* (Gn.)) (Scalloped Sallow) – 22-VIII-2001 1, 9A-IX-2002 1 and 16C-VIII-2006 1.
2001. *Sunira bicolorago* (Gn.) (9957. *Sunira bicolorago* (Gn.)) (Bicolored Sallow) – 25-IX-2001 1.
2002. *Sunira verberata* (Sm.) (9960. *Sunira verberata* (Sm.)) (Western Sallow) – 24-IX-2001 2.
2003. *Anathix puta* (G. & R.) (9962. *Anathix puta* (G. & R.)) (Dusky or Puta Sallow) – 22-VIII-2001 5, 30-VIII-2001 1, 9A-IX-2002 4, 30B-VIII-2003 1, 10B-VIII-2008 1 and 10C-VIII-2008 1.
2005. *Xanthia tatago* Laf. & Mik. (9965. *Xanthia togata* (Esper)) (Pink-barred Sallow) – 17-IX-2001 1, 24-IX-2001 1 and 9A-IX-2002 2.

2008. *Brachylomia populi* (Stkr.) (9993. *Brachylomia populi* (Stkr.)) (Cloaked Peasant) – 9A-IX-2002 1 and 16C-VIII-2006 1.
2010. *Brachylomia discinigra* (Wlk.) (9999. *Brachylomia discinigra* (Wlk.)) (Black-disc Peasant) – 22-VIII-2001 1.
2012. *Parastichtis suspecta* (Wlk.) (9431. *Parastichtis suspecta* (Wlk.)) (Mottled Quaker) – 27-VII-2002 1 and 10A-VIII-2008 1.
2019. *Enargia decolor* (Wlk.) (9549. *Enargia decolor* (Wlk.)) (Angle-striped Sallow) – 4-VIII-2001 1, 22-VIII-2001 2, 25-VIII-2001 1, 24-IX-2001 1, 9A-IX-2002 2, 9B-IX-2002 1, 30A-VIII-2003 1 SR, 30B-VIII-2003 13 SR, 30A-VIII-2004 10 SR, 30M-VIII-2004 2 SR, 16B-VIII-2006 1 and 16C-VIII-2006 1.
2020. *Enargia infumata* (Grt.) (9550. *Enargia infumata* (Grt.)) (Lesser Angle-striped Sallow) – 4-VIII-2002 1, 27A-VII-2003 1, 25-VII-2004 1, 13A-VII-2006 1 and 3C-VIII-2006 1.
2021. *Ipimorpha pleonectusa* Grt. (9555. *Ipimorpha pleonectusa*) Grt. (Even-lined Sallow) – 17-VIII-2002 1, 3B-VIII-2006 1, 25B-VII-2007 1, 10B-VIII-2008 1 and 10C-VIII-2008 1.
2022. *Andropolia contacta* (Wlk.) (9564. *Andropolia contacta* (Wlk.)) – 17-VIII-2002 1 and 25B-VII-2007 1.
2030. *Platypolia anceps* (Steph.) (9976. *Platypolia anceps* (Steph.)) (Rugged Rover) – 17-IX-2001 1.
- Mniotype* spp. – 24A-V-2006 1, 24B-V-2006 1, 24C-V-2006 1 and 26C-VI-2007 1.
2035. *Mniotype ducta* (Grt.) (9987. *Mniotype ducta* (Grt.)) – 12A-VI-2003 1.
2036. *Mniotype prob tenera* (Sm.) (9988. *Mniotype prob tenera* (Sm.)) (Miniota Rover) – 7-VI-2001 3, 12A-VI-2003 1 and 19A-VI-2005 1.
2037. *Sutyna profunda* (Sm.) (9990. *Sutyna profunda* (Sm.)) (Profound Sallow) – 13C-VIII-2006 1 and 16B-VIII-2006 1.

### Noctuidae, Noctuinae, Orthosiini

2042. *Stretchia plusiaeformis* Hy. Edw. (10471. *Stretchia plusiaeformis* Hy. Edw.) (Gray Spectacles) – 25-IV-2001 4, 28-IV-2001 1, 10-V-2002 2 and 19-V-2002 1.
2044. *Orthosia revicta* (Morr.) (10490. *Orthosia revicta* (Morr.)) – 25-IV-2001 6, 28-IV-2001 6, 15-V-2001 3, 10-V-2002 3, 29-V-2002 1, 20A-V-2005 1 and 23B-V-2009 1.
2045. *Orthosia segregata* (Sm.) (10493. *Orthosia segregata* (Sm.)) (Subdued Quaker) – 25-IV-2001 10, 28-IV-2001 1 and EM, 7-V-2001 3, 15-V-2001 1, 19-V-2002 1, 29-V-2002 1 and 10A-VI-2005 1. *Orthosia segregata* f. *negussa* (Sm.) – 15-IV-2001 2, 25-IV-2001 14, 28-IV-2001 8 and 29-V-2002 1.
2046. *Orthosia hibisci* (Gn.) (10495. *Orthosia hibisci* (Gn.)) (Variable Penman or Speckled Green Fruitworm Moth) – 25-IV-2001 10, 28-IV-2001 2, 10-V-2002 3, 19-V-2002 1, 24A-V-2006 1, 23A-V-2009 1, 23B-V-2009 1 and 23C-V-2009 1.
2049. *Egira dolosa* (Grt.) (10513. *Egira dolosa* (Grt.)) (Grieving Woodling or Greater Black-letter Dart) – 25-IV-2001 1, 19-V-2002 1 and 29-V-2002 1.

### Noctuidae, Noctuinae, Tholerini

2053. *Nephelodes minians* Gn. 10524. *Nephelodes minians* Gn. (Shaded Umber or Brown Cutworm Moth) – 22-VII-2001 1, 30-VIII-2001 1, 17-VIII-2002 1, 9A-IX-2002 2, 8A-VIII-2003 1, 30B-VIII-2003 3 SR, 30W-VIII-2004 1, 30M-VIII-2004 1 SR, 3A-VIII-2006 1, 16A-VIII-2006 1, 16B-VIII-2006 1, 16C-VIII-2006 1 and 10B-VIII-2008 1.

### Noctuidae, Noctuinae, Hadenini

2058. *Anarta trifolii* (Hufn.) 10223. *Discestra trifolii* (Hufn.) – 4-VI-2004 1.
2059. *Anarta mutata* (Dod) (10224. *Discestra mutata* (Dod)) – 12B-VI-2003 1.
2064. *Anarta farnhami* (Grt.) (10232. *Discestra farnhami* (Grt.)) (Farnham's Discestra) – 7-VI-2001 2, 12A-VI-2003 4, 12B-VI-2003 1, 4-VI-2004 1, 26A-V-2005 2, 24B-V-2006 1, 24C-V-2006 1 and 19B-VI-2008 1.
2074. *Polia nimbosa* (Gn.) (10275. *Polia nimbosa* (Gn.)) – 22-VI-2001 3, 15-VII-2001 1, 23-VI-2002 3 and 17-VIII-2002 1, 24A-VI-2006 1, 24B-VI-2006 1, 24C-VI-2006 1, 26B-VI-2007 1 and 26C-VI-2007 1.
2075. *Polia imbrifera* (Gn.) (10276. *Polia imbrifera* (Gn.)) (Cloudy Arches) – 5-VII-2001 1, 24C-VI-2006 1, 13A-VII-2006 1 and 26B-VI-2007 1.
2079. *Polia purpurissata* (Grt.) (10280. *Polia purpurissata* (Grt.)) (Purple Arches) – 15-VII-2001 1, 4-VIII-2001 2, 27-VII-2002 1, 17-VIII-2002 1, 20B-VII-2003 1, 27A-VII-2003 1, 25-VII-2004 2, 13A-VII-2006 1, 13B-VII-2006 2, 3A-VIII-2006 1, 3B-VIII-2006 2, 16C-VIII-2006 1, 25B-VII-2007 1, 25C-VII-2007 1, 10A-VIII-2008 1 and 10C-VIII-2008 1.
2082. *Lacanobia atlantica* (Grt.) (10297. *Lacanobia atlantica* (Grt.)) (Atlantic Arches) – 31-V-2001 1, 7-VI-2001 1, 22-VI-2001 1, 23-VI-2002 1, 27-VII-2002 1, 19B-VI-2005 1, 24B-VI-2006 1 and 12A-VI-2009 1.
2083. *Lacanobia radix* (Wlk.) (10298. *Lacanobia radix* (Wlk.)) (Garden Arches) – 7-VI-2001 4, 15-V-2001 1, 22-VI-2001 1, 20A-V-2005 2, 26A-VI-2005 1, 24A-V-2006 1, 24B-V-2006 1, 24C-V-2006 2, 24A-VI-2006 1, 26B-VI-2007 1, 29-V-2008 1 and 4C-VI-2010 1.
2085. *Melanchra adjuncta* (Gn.) (10292. *Melanchra adjuncta* (Gn.)) (Hitched Arches) – 24B-VI-2006 2, 13B-VII-2006 1, 10B-VIII-2008 1 and 12C-VI-2009 1.
2088. *Melanchra assimilis* (Morr.) (10295. *Melanchra assimilis* (Morr.)) (Black Arches) – 22-VI-2001 1, 4-VI-2004 1, 19A-VI-2005 1, 26B-VI-2007 1 and 19A-VI-2008 1.
2089. *Spiramater grandis* (Gn.) (10301. *Spiramater lutra* (Gn.)) – 22-VI-2001 1, 23-VI-2002 1, 24A-V-2006 1, 24A-VI-2006 1, 24C-VI-2006 1 and 19C-VI-2008 1.
2096. *Trichordestra liquida* (Grt.) (10308. *Trichordestra liquida* (Grt.)) (Liquid Arches) – 31-V-2001 2, 7-VI-2001 1, 22-VI-2001 1, 19A-VI-2005 1, 24A-V-2006 2 and 24C-VI-2006 1.
2102. *Mamestra configurata* Wlk. (10271. *Mamestra configurata* Wlk.) (Bertha Armyworm) – 22-VI-2001 4, 5-VII-2001 1 and 13A-VII-2006 1.
2107. *Sideridis rosea* (Harv.) (10265. *Sideridis rosea* (Harv.)) (Rosy Penman) – 31-V-2001 1, 22-VI-2001 1, 12A-VI-2003 1, 4-VI-2004 1, 26A-V-2005 1, 19A-VI-2005 1, 24A-V-2006 1, 24B-V-2006 1, 24C-V-2006 1, 24C-VI-2006 1, 29-V-2008 1 and 19C-VI-2008 1.
2110. *Hadena circumvadis* Sm. (10322. *Anepia circumvadis* Sm.) – 22-VI-2001 1, 29A-VI-2003 1 and 29B-VI-2003 1.

### Noctuidae, Noctuinae, Leucaniini

2112. *Faronta diffusa* (Wlk.) (10431. *Faronta diffusa* (Wlk.)) (Cloudy Wainscot or Wheat-head Armyworm Moth) – 23-VI-2002 1, 17-VIII-2002 1, 19A-VI-2005 1 and 19B-VI-2005 1 and 24A-VI-2006 1.
2114. *Mythimna oxygala* (Grt.) (10436. *Aletia oxygala* (Grt.)) (Lesser Wainscot) – 15-VII-2001 1, 27-VII-2002 1, 17-VIII-2002 1, 9A-IX-2002 1, 13A-VII-2006 1, 13B-VII-2006 1, 3C-VIII-2006 1, 26C-VI-2007 1, 25B-VII-2007 1, 25C-VII-2007 1, 25D-VII-2007 1, 10A-VIII-2008 1 and 10B-VIII-2008 1.
2118. *Leucania multilinea* Wlk. (10446. *Leucania multilinea* Wlk.) (Many-lined Wainscot) – 25B-VII-2007 1 and 10B-VIII-2008 1.

2119. *Leucania commoides* Gn. (10447. *Leucania commoides* Gn.) (Comma Wainscot) – 22-VI-2001 1, 15-VII-2001 3, 4-VIII-2001 2, 13A-VII-2006 1, 13B-VII-2006 1, 13C-VII-2006 1, 25D-VII-2007 1 and 10A-VIII-2008 1.

2120. *Leucania insueta* Gn. (10449. *Leucania insueta* Gn.) (Heterodox Wainscot) – 7-VI-2001 4, 22-VI-2001 2, 19B-VI-2005 1, 24A-VI-2006 2, 26B-VI-2007 1, 26C-VI-2007 1, 19C-VI-2008 1 and 12C-VI-2009 1.

#### Noctuidae, Noctuinae, Eriopygini

2142. *Lacinipolia meditata* (Grt.) (10368. *Lacinipolia meditata* (Grt.)) (The Thinker or Pink-backed Cutworm Moth) – 4-VIII-2001 5, 17-VIII-2002 2, 3A-VIII-2006 1, 25b-VII-2007 1, 25C-VII-2007 1, 25D-VII-2007 1, 10A-VIII-2008 1 and 10C-VIII-2008 1.

2143. *Lacinipolia lustralis* (Grt.) (10370. *Lacinipolia lustralis* (Grt.)) (Lustrous Arches) – 22-VI-2001 7, 5-VII-2001 1, 23-VI-2002 3, 29B-VI-2003 1, 10A-VII-2003 1, 10B-VII-2003 1, 18-VI-2004 4, 19A-VI-2005 1, 24A-VI-2006 2, 24B-VI-2006 1, 24C-VI-2006 1, 26B-VI-2007 2, 26C-VI-2007 1, 26D-VI-2007 2, 19B-VI-2008 1 and 19C-VI-2008 1.

2148. *Lacinipolia vicina* (Grt.) (10394. *Lacinipolia vicina* (Grt.)) (Small Gray Arches) – 15-VII-2001 1, 4-VIII-2001 1 and 25-VII-2004 1.

2150. *Lacinipolia renigera* (Steph.) (10397. *Lacinipolia renigera* (Steph.)) (Kidney-spotted Arches or Bristly Cutworm Moth) – 15-VII-2001 1, 4-VIII-2001 1, 25M-VII-2004 1, 25W-VII-2004 1 SR, 24C-VI-2006 1, 13A-VII-2006 1, 13B-VII-2006 1, 25D-VII-2007 1, 10A-VIII-2008 1, 10B-VIII-2008 1 and 10C-VIII-2008 1.

2152. *Lacinipolia lorea* (Gn.) (10405. *Lacinipolia lorea* (Gn.)) (Bridled Arches) – 22-VI-2001 1, 29A-VI-2003 1, 24A-VI-2006 1, 24C-VI-2006 1, 26B-VI-2007 1, 26C-VI-2007 1, 26D-VI-2007 1, 19A-VI-2008 1, 12B-VI-2009 1 and 12C-VI-2009 1.

2153. *Lacinipolia olivacea* (Morr.) (10406. *Lacinipolia olivacea* (Morr.)) (Olive Arches) – 15-VII-2001 1, 4-VIII-2001 1, 17-VIII-2002 1, 13A-VII-2006 1, 3B-VIII-2006 1, 10A-VIII-2008 1, 10B-VIII-2008 1 and 10C-VIII-2008 1.

2162. *Protorthodes oviduca* (Gn.) (10563. *Protorthodes oviduca* (Gn.)) (Ruddy Quaker) – 15-V-2001 5, 31-V-2001 4, 7-VI-2001 2, 22-VI-2001 1, 23-VI-2002 4 SR, 12A-VI-2003 1, 12B-VI-2003 1, 29A-VI-2003 1, 4A-VI-2004 2 (13 SR), 4B-VI-2004 16 SR, 26A-V-2005 1 and 19B-VI-2005 1, 24A-V-2006 1, 24B-V-2006 1, 26B-VI-2007 1, 29-V-2008 2, 19B-VI-2008 1, 19C-VI-2008 1, 12B-VI-2009 1, 12C-VI-2009 1 and 4A-VI-2010 1.

2165. *Orthodes goodelli* (Grt.) (10289. *Polia goodelli* (Grt.)) (Goodell's Arches) – 24C-VI-2006 1 and 19b-VI-2008 1.

2166. *Orthodes obscura* (Sm.) (10290. *Polia obscura* (Sm.)) (Obscure Arches) – 24A-V-2006 1 and 29-V-2008 3.

2168. "Polia" *detracta* (Wlk.) (10288. *Polia detracta* (Wlk.)) (Disparaged Arches) – 22-VI-2001 1, 12B-VI-2003 1, 29A-VI-2003 1, 4-VI-2004 1, 19B-VI-2005 1, 24C-V-2006 1, 24A-VI-2006 1, 24C-VI-2006 1 and 12A-VI-2009 1.

#### Noctuidae, Noctuinae, Noctuini

2172. *Peridroma saucia* (Hbn.) (10915. *Peridroma saucia* (Hbn.)) (Variegated Cutworm Moth) – 30-VIII-2001 1.

2174. *Anicla tepperi* (Sm.) (10910. *Euagrotis tepperi* (Sm.)) (Black-girdled Dart) – 22-VI-2001 2, 9B-IX-2002 1, 4-VI-2004 1 and 26D-VI-2007 2.

2176. *Actebia balanitis* (Grt.) (10923. *Actebia balanitis* (Grt.)) (Acorn Dart) – 22-VI-2001 1.

2188. *Euxoa adumbrata* (Ev.) (not in Hodges) (Sordid Dart) – 22-VI-2001 1.
2189. *Euxoa auxiliaris* (Grt.) (10731. *Chorizagrotis auxiliaris* (Grt.) (Auxiliary Dart) – 4-VIII-2001 1, 29A-VI-2003 1 and 3A-VIII-2006 1.
2191. *Euxoa mimallonis* (Grt.) (10738. *Euxoa mimallonis* (Grt.)) (Ruddy Dart) – 17-VIII-2002 1 and 9A-IX-2002 1.
2194. *Euxoa messoria* (Harr.) (10705. *Euxoa messoria* (Harr.)) (Reaper Dart or Dark-sided Cutworm) – 17-VIII-2002 1 and 25-VII-2004 1.
2195. *Euxoa divergens* (Wlk.) (10702. *Euxoa divergens* (Wlk.)) (Divergent Dart) – 3-V-2001 1, 22-VI-2001 4, 15-VII-2001 1, 23-VI-2002 1, 29A-VI-2003 1, 29B-VI-2003 1, 10A-VII-2003 1, 10B-VII-2003 1, 19A-VI-2005 1, 19B-VI-2005 1, 24A-VI-2006 1, 24C-VI-2006 1, 26D-VI-2007 1 and 10B-VIII-2008 1.
2200. *Euxoa scandens* (Riley) (10715. *Euxoa scandens* (Riley)) (Climbing Dart, White Cutworm Moth) – 22-VI-2001 1.
2204. *Euxoa tristicula* (Morr.) (10723. *Euxoa tristicula* (Morr.)) (Three-marked Dart, Early Cutworm Moth) – 7-VI-2001 2, 22-VI-2001 9, 15-VII-2001 3, 23-VI-2002 1 and 12C-VI-2009 1.
2207. *Euxoa pestula* Sm. (10728. *Euxoa pestula* Sm.) (Pestula Dart) – 22-VI-2001 1.
2212. *Euxoa intrita* (Morr.) (10749. *Euxoa intrita* (Morr.)) (Tippling Dart) – 17-VIII-2002 16, 8A-VIII-2003 1 and 3B-VIII-2006 1.
2215. *Euxoa declarata* (Wlk.) (10755. *Euxoa declarata* (Wlk.)) (Clear Dart) – 30-VIII-2001 1, 9A-IX-2002 1 and 30-VIII-2004 1.
2216. *Euxoa campestris* (Grt.) (10756. *Euxoa campestris* (Grt.)) (Flat Dart) – 30-VIII-2001 1, 9A-IX-2002 3, 9B-IX-2002 2, 30-VIII-2004 1, 3C-VIII-2006 1, 10A-VIII-2008 1 and 10C-VIII-2008 1.
2222. *Euxoa albipennis* (Grt.) (10807. *Euxoa albipennis* (Grt.)) (White-winged Dart) – 22-VIII-2001 2, 9A-IX-2002 2 and 9B-IX-2002 1.
2228. *Euxoa ochrogaster* (Gn.) (10801. *Euxoa ochrogaster* (Gn.)) (Red-backed Cutworm Moth) – 4-VIII-2001 2, 22-VIII-2001 1, 27-VII-2002 1, 17-VII-2002 1, 9A-IX-2002 1, 9B-IX-2002 1, 10A-VIII-2008 1, 10B-VIII-2008 2 and 10C-VIII-2008 1.
2232. *Euxoa obeliscoidea* (Gn.) (10817. *Euxoa obeliscoidea* (Gn.)) (Obelisk Dart) – 30A-VIII-2003 1.
2233. *Euxoa basalis* (Grt.) (10798. *Euxoa basalis* (Grt.)) (Pale-based Dart) – 4-VIII-2001 1, 22-VIII-2001 1, 27-VII-2002 2, 17-VIII-2002 1, 9B-IX-2002 1 and 8B-VIII-2003 1.
2235. *Euxoa castanea* Laf. (not in Hodges) – 15-VII-2001 1.
2239. *Euxoa servitus* (Sm.) (10854. *Euxoa servita* (Sm.)) (Servita Dart) – 25B-VII-2007 1 and 10A-VIII-2008 2.
2240. *Euxoa auripennis* Laf. or 2239. *Euxoa servitus* (Sm.) (10852. *Euxoa auripennis* Lafontaine or 10854 *Euxoa servita* (Sm.)) (Servita Dart) – 4-VIII-2001 4, 22-VIII-2001 1, 27-VII-2002 1, 17-VIII-2002 1, 9A-IX-2002 2, 9B-IX-2002 1, 27A-VII-2003 1 and 25-VII-2004 1.
2252. *Euxoa quadridentata* (G. & R.) (10830. *Euxoa quadridentata* (G. & R.)) (Four-toothed Dart) – 30-VIII-2001 1, 9A-IX-2002 1, 9B-IX-2002 2 and 30A-VIII-2003 1.
2257. *Euxoa aequalis* (Harv.) (10777. *Euxoa aequalis* (Harv.)) (Aequalis Dart) – 22-VI-2001 1, 22-VIII-2001 1, 30-VIII-2001 1, 24-IX-2001 1, 9A-IX-2002 4, 9B-IX-2002 7, 30A-VIII-2003 2 and 30B-VIII-2003 1.
2270. *Euxoa maimes* (Sm.) (10861.1. *Euxoa maimes* (Sm.)) – 22-VIII-2001 1.
2271. *Euxoa ridingsiana* (Grt.) (10861. *Euxoa ridingsiana* (Grt.)) (Riding's Dart) – 4-VIII-2001 2, 22-VIII-2001 1, 27-VII-2002 1, 17-VIII-2002 2, 12A-VI-2003 1, 30-VIII-2004 1 and 10A-VIII-2008 1.

2274. *Feltia jaculifera* (Gn.) (10670. *Feltia jaculifera* (Gn.)) (Gothic Dart or Dingy Cutworm Moth) – 4-VIII-2001 5, 23-VIII-2001 1, 27-VII-2002 2, 17-VIII-2002 2, 9A-IX-2002 1, 8A-VIII-2003 1, 25-VII-2004 1, 3A-VIII-2006 1, 16B-VIII-2006 1, 25B-VII-2007 1, 25D-VII-2007 1, 10A-VIII-2008 1, 10B-VIII-2008 1 and 10C-VIII-2008 1.
2275. *Feltia herilis* (Grt.) (10676. *Feltia herilis* (Grt.)) (Master's Dart) – 15-VII-2001 2, 4-VIII-2001 8, 27-VII-2002 1, 13A-VII-2006 1, 25B-VII-2007 1, 25D-VII-2007 1, 10A-VIII-2008 1 and 10C-VIII-2008 1.
2280. *Agrotis orthogonia* Morr. (10645. *Agrotis orthogonia* Morr.) (Pale Western Cutworm) – 10A-VIII-2008 1.
2282. *Agrotis venerabilis* Wlk. (10651. *Agrotis venerabilis* Wlk.) (Venerable Dart) – 22-VIII-2001 3, 30-VIII-2001 1, 9A-IX-2002 2, 9B-IX-2002 1, 30A-VIII-2003 1 SR, 30B-VIII-2003 6 SR, 30A-VIII-2004 1 (6SR), 30M-VIII-2004 1 SR, 16A-VIII-2006 1, 16B-VIII-2006 1 and 16C-VIII-2006 1.
2283. *Agrotis vancouverensis* Grt. (10652. *Agrotis vancouverensis* Grt.) – 31-V-2001 3, 7-VI-2001 1, 22-VI-2001 5, 23-VI-2002 1, 12B-VI-2003 1, 18-VI-2004 2, 26A-V-2005 1, 24A-V-2006 1, 24C-V-2006 1, 24A-VI-2006 1, 26D-VI-2007 1, 19B-VI-2008 1, 19C-VI-2008 1, 12A-VI-2009 1 and 12C-VI-2009 1.
2289. *Ochropleura implecta* (L.) (10891. *Ochropleura plecta* (L.)) (Flame-shouldered Dart – 22-VI-2001 1, 17-VIII-2002 1, 24C-VI-2006 1 and 26B-VI-2007 1.
2292. *Diarsia rubifera* (Grt.) (10917. *Diarsia rubifera* (Grt.)) (Rubifera Dart) – 4-VIII-2001 1 and 10B-VIII-2008 3.
2293. *Diarsia rosaria* (Grt.) (10921. *Diarsia rosaria* (Grt.)) (Rosy Dart) – 22-VI-2001 1.
2294. *Cerastis salicarum* (Wlk.) (10996. *Cerastis salicarum* (Wlk.)) (Willow Dart) – 25-IV-2001 3, 28-IV-2001 1, 10-V-2002 1, 19-V-2002 1 and 23A-V-2009 1.
2295. *Paradiarsia littoralis* (Pack.) (10992. *Paradiarsia littoralis* (Pack.)) (Labrador Dart) – 31-V-2001 1, 22-VI-2001 3, 5-VII-2001 2, 23-VI-2002 1, 29A-VI-2003 1, 29B-VI-2003 1, 10A-VII-2003 14 SR, 10B-VII-2003 6 SR, 4-VI-2004 1, 18-VI-2004 1, 19A-V-2005 1, 24A-VI-2006 1, 24C-VI-2006 1, 26B-VI-2007 1, 26C-VI-2007 1, 26D-VI-2007 1, 19A-VI-2008 1, 19B-VI-2008 1, 19C-VI-2008 1 and 12C-VI-2009 1.
2301. *Cryptocala acadiensis* (Bethune) (11012. *Cryptocala acadiensis* (Bethune)) (Catocaline Dart) – 15-VII-2001 2, 4-VIII-2001 2, 4-VIII-2002 2, 25-VII-2004 1, 13A-VII-2006 1, 13B-VII-2006 1, 3A-VIII-2006 1, 25B-VII-2007 1, 10B-VIII-2008 1 and 10C-VIII-2008 1.
2302. *Spaelotis clandestina* (Harr.) (10926. *Spaelotis clandestina* (Harr.)) (Clandestine Dart) – 22-VI-2001 1, 30-VIII-2001 1, 23-VI-2002 1, 29A-VI-2003 1, 25-VII-2004 2, 24A-VI-2006 1, 24C-VI-2006 1 and 28-VI-2008 1.
2303. *Spaelotis bicava* Lafontaine (not in Hodges) – 22-VI-2001 1.
2304. *Eurois occulta* (L.) (10929. *Eurois occulta* (L.)) (Great Gray Dart) – 22-VI-2001 2, 24-IX-2001 1, 17-VIII-2002 1, 24B-VI-2006 1, 13B-VII-2006 1, 3B-VIII-2006 1, 3C-VIII-2006 1 and 16C-VIII-2006 1.
2305. *Eurois astricta* Morr. (10930. *Eurois astricta* Morr.) (Great Brown Dart) – 15-VII-2001 3, 25-VII-2004 2, 13A-VII-2006 1, 13B-VII-2006 1 and 25D-VII-2007 1.
2307. *Graphiphora augur* (F.) (10928. *Graphiphora augur* (Grt.)) (Soothsayer Dart) – 22-VIII-2001 1, 13A-VII-2006 2 and 13B-VII-2006 2.
2313. *Xestia smithii* (Snell.) (10944. *Xestia smithii* (Snell.)) (Spotted-clay Dart or Smith's Dart) – 4-VIII-2001 2, 22-VIII-2001 1, 17-VIII-2002 2, 25-VII-2004 1, 13A-VII-2006 1, 3A-VIII-2006 1, 3B-VIII-2006 1, 3C-VIII-2006 1, 16B-VIII-2006 1, 16C-VIII-2006 1, 25B-VII-2007 1, 25D-VII-2007 1, 10A-VIII-2008 1 and 10B-VIII-2008 1.

2314. *Xestia normanianus* (Grt.) (10943. *Xestia normaniana* (Grt.)) (Norman's Dart) – 3A-VIII-2006 1 and 3C-VIII-2006 1.
2322. *Xestia c-nigrum* (L.) (10942. *Xestia c-nigrum* (Franc.)) (Black-letter Dart) – 22-VI-2001 3, 15-VII-2001 2, 4-VIII-2001 1, 24B-VI-2006 1, 13A-VII-2006 1 and 26B-VI-2007 1.
2333. *Coenophila opaciformis* (Grt.) (10988. *Eugrapha subrosea opaciformis* (Grt.)) – 17-VIII-2002 1. This species is typically associated with bogs, a habitat which does not exist in this area.
2335. *Agnorisma bugrai* (Koçak) (10954. *Agnorisma bugrai* (Koçak)) (Collared Dart) – 22-VIII-2001 8, 30-VII-2001 1, 9A-IX-2002 1, 9B-IX-2002 2, 8A-VIII-2003 2, 30-VIII-2004 1, 16A-VIII-2006 1, 16B-VIII-2006 1 and 16C-VIII-2006 1.
2337. *Pseudohermonassa tenuicula* (Morr.) (10951. *Pseudohermonassa tenuicula* (Morr.)) (Hairpin Dart) – 15-VII-2001 2, 4-VIII-2001 2, 25-VIII-2004 1, 13A-VII-2006 2, 13B-VII-2006 2, 3B-VIII-2006 1, 25B-VII-2007 2 and 10B-VIII-2008 1.
2344. *Protolampra rufipectus* (Morr.) (11004. *Protolampra rufipectus* (Morr.)) (Red-breasted Dart) – 4-VIII-2001 2, 27-VII-2002 2, 17-VIII-2002 1, 13A-VII-2006 1, 3A-VIII-2006 1, 3B-VIII-2006 1, 3C-VIII-2006 1, 16A-VIII-2006 1, 16C-VIII-2006 1, 10B-VIII-2008 2 and 10C-VIII-2008 1.
2355. *Abagrotis hermina* Laf. (not in Hodges) – 30-VIII-2001 1, 17-VIII-2002 1 and 27A-VII-2003 1.
2357. *Abagrotis placida* (Grt.) group (11041. *Abagrotis placida* (Grt.) group) – 4-VIII-2004 1 and 3A-VIII-2006 1.

## ***DISCUSSION***

An analysis of the data up to the end of last year's report of the moths encountered in twelve major study areas in south-central Alberta, reveals that the present area (BL) is most similar (60.29%) to the semi-urban Erskine site (ER), (57.50%) to the aspen parkland of the Allen Hall site (AH), (57.10) to the Rochon Sands site, (57.03% to the Dry Island Site, and (56.38% to the Big Knife site (BK). It was least similar (35.02%) to the Collett site (JC).

These results point out the need, when setting aside areas for protection such as Parks, Ecological Areas and Conservation Areas, that they be of sufficient size so that they provide protection for a larger number of species. Though the present study deals primarily with moths, the same reasoning obviously applies to other faunistic groups, as well as to all floristic groups.

## ***SUMMARY***

Five hundred and forty-four species of moths and five butterflies are reported from the Buffalo Lake Conservation Area. While this may seem an impressive number, it is felt that, with further study and the identification of numerous unknowns, this total could be brought up to around 700. To put things into perspective, Pohl et al (2010) document 2367 species of Lepidoptera for Alberta.

It was interesting that another specimen of *Oncocnemis saundersiana* was found in 2002. This species, found in the area in 2001, has still not been collected anywhere else in Alberta. A specimen of *Scythris mixaula* was collected in 2003 and it was a second record for Alberta and also for Canada. *Pyrausta scurralis*, which has been collected three times in the area, has only been found in one other area in Alberta. The collection in 2005 of a specimen of *Acanthopteroctetes bimaculata*, also a second report for Alberta, is further evidence that other interesting findings remain to be made.

Of the 13 major areas involved in the present study, four species of moths were found only at BL - *Acanthopteroctetes bimaculata*, *Scythris mixaula*, *Sympistis saundersiana* and *Sympistis viriditincta*.

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### ***USEFUL ONLINE INFORMATION SOURCES ON MOTHS***

Information on, and illustrations of, many of our Alberta moths can be found at the Entomology Collection Search site of the E.H. Strickland Entomological Museum of the Department of Biological Sciences at the University of Alberta: <http://virtual-museum.sunsite.ualberta.ca/dig.search/ent/ent/>.

Illustrations of Alberta macromoths can be found at a site put together by D. Lafontaine and J. Troubridge called "The Moths of Canada":

[http://www.cbif.gc.ca/spp\\_pages/misc\\_moths/phps/mothindex\\_e.php](http://www.cbif.gc.ca/spp_pages/misc_moths/phps/mothindex_e.php).

Illustrations on many of the western American moths can also be found on a site put together by The Moth Photographers Group:

<http://www.origins.tv/MothPhotographersGroup/WestPlates.htm>.

D. Lynn Scott has a web site with natural photos of over 400 species of moths that she has found in Ottawa, Ontario (<http://acleris.com/dls/mothindex.html>). As many of the species also occur in Alberta, these images can be quite helpful.

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**APPENDIX**  
Collection dates, sites and other details

- 1 April 2001 – Diurnal, aspen parkland, 52.51, 112.70, 800 m.  
 15 April 2001 – UV, aspen parkland, 52.51, 112.70, 800 m.  
 25 April 2001 – UV, aspen parkland, 52.51, 112.70, 800 m.  
 28 April 2001 – UV, aspen parkland, 52.51, 112.70, 800 m.  
 7 May 2001 – UV, aspen parkland, 52.51, 112.70, 800 m.  
 15 May 2001 – UV, aspen parkland, 52.51, 112.70, 800 m.  
 31 May 2001 – UV, aspen parkland, 52.51, 112.70, 800 m.  
 7 June 2001 – UV, aspen parkland, 52.51, 112.70, 800 m.  
 22 June 2001 – UV, aspen parkland, 52.51, 112.70, 800 m.  
 15 July 2001 – UV, aspen parkland, 52.51, 112.70, 800 m.  
 4 August 2001 – UV, aspen parkland, 52.51, 112.70, 800 m.  
 22 August 2001 – UV, aspen parkland, 52.51, 112.70, 800 m.  
 30 August 2001 – UV, aspen parkland, 52.51, 112.70, 800 m.  
 12 September 2001 – UV, aspen parkland, 52.51, 112.70, 800 m.  
 17 September 2001 – UV, aspen parkland, 52.51, 112.70, 800 m.  
 24 September 2001 – UV, aspen parkland, 52.51, 112.70, 800 m.  
 10 May 2002 – UV, SW5, near E fence and trail, aspen, 52.483, 112.703, 850 m.  
 19 May 2002 – UV, SW5, near E fence and trail, aspen, 52.483, 112.703, 850 m.  
 29 May 2002 – UV, SW5, near E fence and trail, aspen, 52.483, 112.703, 850 m.  
 23 June 2002 – UV, SW5, near E fence and trail, aspen, 52.483, 112.703, 850 m.  
 27 July 2002 – UV, NW5, north side of trail through big clearing, 52.303, 112.75, 850 m.  
 17 August 2002 – UV and MV, aspen woods, west side of big clearing, 52.51, 112.71, 810 m, with  
     Gary Anweiler, Felix Sperling and Doug Macaulay.  
 9A September 2002 – UV and MV, aspen woods, west side of big clearing, 52.51,  
     112.71, 810 m.  
 9B September 2002 – UV, prairie and silverwillow, 52.51, 112.70, 810 m.  
 4 June 2004 – Crepuscular, buckbrush, 52.50, 112.704, 790 m.  
 4A June 2004 – UV, aspen woods, 52.50, 112.712, 800 m.  
 4B June 2004 – UV, silverwillow/buckbrush/grassland, 52.50, 112.704, 790 m.  
 18W June 2004 – UV, aspen woods, 52.50, 112.712, 800 m.  
 18G June 2004 – UV, native grassland near sloughs, 52.50, 112.72, 800 m.  
 25M July 2004 – UV, silverwillow/buckbrush grassland, 52.50, 112.704, 790 m.  
 25W July 2004 – UV, aspen woods, 52.50, 112.712, 800 m.  
 30W August 2004 – UV, aspen woods, 52.50, 112.712, 800 m.  
 30M August 2004 – UV, silverwillow/buckbrush/grassland, 52.50, 112.704, 790 m.  
 20 May 2005 – UV, buckbrush/aspen/saskatoon, near highway, beside trail, 52.493, 112.693,  
     814 m.  
 26 May 2005 – UV, buckbrush/aspen/saskatoon, near highway, beside trail, 52.493, 112.693,  
     814 m.  
 19A June 2005 – UV, silverwillow/buckbrush grassland, 52.50, 112.704, 790 m. Lots of  
     mosquitoes.  
 19B June 2005 – UV, S-facing hillside with Stipa/Koeleria grassland, 52.498, 112.700, 819 m. Lots  
     of mosquitoes.

- 13A May 2006 – UV, saskatoon/silverwillow/aspen, top of hill, beside pipeline, 52.49649, 112.70078, 804 m.
- 13B May 2006 – UV, buckbrush/aspen, 400 yards in from east gate, 52.49396, 112.69505, 822 m.
- 24A May 2006 – UV, saskatoon/silverwillow/aspen, top of hill, near pipeline, 52.49649, 112.70078, 804 m.
- 24B May 2006 – UV, silverwillow/buckbrush/pussytoes, 500 yards in from east gate, 52.49364, 112.69632, 811 m.
- 24C May 2006 – UV, aspen/buckbrush, 400 yards in from east gate, 52.49396, 112.69505, 822 m.
- 24A June 2006 – UV, saskatoon/silverwillow/aspen, top of hill, near pipeline, 52.49649, 112.70078, 804 m.
- 24B June 2006 – UV, silverwillow/buckbrush/pussytoes, 500 yards in from east gate, 52.49364, 112.69632, 811 m.
- 24C June 2006 – UV, aspen/buckbrush, 400 yards in from east gate, 52.49396, 112.69505, 822 m.
- 13A July 2006 – UV, aspen/buckbrush, 400 yards in from east gate, 52.49396, 112.69505, 822 m.
- 13B July 2006 – UV, fescue/buckbrush, near highway, beside access trail, 52.493, 112.693, 814 m.
- 3A August 2006 – UV, silverwillow/buckbrush/pussytoes, 500 yards in from east gate, 52.49364, 112.69632, 811 m. Traps set up on Buffalo Lake Naturalist's Field trip.
- 3B August 2006 – UV, aspen/buckbrush, 400 yards in from east gate, 52.49396, 112.69505, 822 m. Traps set up on Buffalo Lake Naturalist's Field trip.
- 3C August 2006 – UV, fescue/buckbrush, near highway, beside access trail, 52.493, 112.693, 814 m. Traps set up on Buffalo Lake Naturalist's Field trip.
- 16A August 2006 – UV, ACA quarter, near SW gate, Artemisia/buckbrush grassland, 52.49850, 112.70237, 789 m.
- 16B August 2006 – UV, silverwillow/buckbrush/pussytoes, 500 yards in from east gate, 52.49364, 112.69632, 811 m.
- 16C August 2006 – UV, aspen/buckbrush, 400 yards in from east gate, 52.49396, 112.69505, 822 m.
- 26A May 2007 – diurnal, hiking, aspen parkland, 52.50, 112.69, 820-900 m.
- 26A June 2007 – Crepuscular, aspen parkland, 18 km NNW of Stettler, SW18-40-19-W5, 52.498, 112.738, 770 m.
- 26B June 2007 – UV, aspen woods with saskatoon/roses, 18 km NNW Stettler, SW18-40-19-W5, 52.499, 112.738, 786 m.
- 26C June 2007 – UV, open area with silverwillow, near marsh, 18 km NNW Stettler, SW18-40-19-W5, 52.498, 112.739, 766 m.
- 26D June 2007 – UV, silverwillow/buckbrush/yarrow, 18 km NNW Stettler, SW18-40-19-W5, 52.498, 112.739, 767 m.
- 25A July 2007 – Crepuscular, aspen parkland, 18 km NNW of Stettler, SW18-40-19-W5, 52.498, 112.738, 770 m.
- 25B July 2007 – UV, aspen woods with saskatoon/roses, Buffalo Lake Conservation Area, 18 km NNW Stettler, SW18-40-19-W5, 52.499, 112.738, 786 m.
- 25C July 2007 – UV, Buffalo Lake Conservation Area, open area with silverwillow, near marsh, 18 km NNW Stettler, SW18-40-19-W5, 52.498, 112.739, 766 m.
- 25D July 2007 – UV, silverwillow/buckbrush/yarrow, Buffalo Lake Conservation Area, 18 km NNW Stettler, SW18-40-19-W5, 52.498, 112.739, 767 m.

- 29A May 2008 – UV, *Populus balsamifera* woods, Buffalo Lake Conservation Area, Potter's Seep, 18 km N of Stettler, 52.501, 112.697, 800 m.
- 29B May 2008 – UV, native grassland on hill, Buffalo Lake Conservation Area, 18 km N of Stettler, 52.503, 112.696, 820 m.
- 19A June 2008 – UV, aspen woods, Buffalo Lake Conservation Area, 18 km NNW of Stettler, 52.498, 112.738, SW18-40-19-W5, 770 m.
- 19B June 2008 – UV, open area with silver willow, beside marsh, Buffalo Lake Conservation Area, 18 km NNW of Stettler, 52.498, 112.739, SW18-40-19-W5, 766 m.
- 19C June 2008 – UV, silverwillow/buckbrush/yarrow, Buffalo Lake Conservation Area, 18 km NNW of Stettler, 52.498, 112.739, SW18-40-19-W5, 767 m.
- 10A August 2008 – UV, silverwillow/buckbrush/pussytoes, Buffalo Lake Conservation Area, 18 km N of Stettler, abt 500 yards west of east gate, 52.494, 112-696, 810 m.
- 10B August 2008 – UV, aspen/buckbrush, Buffalo Lake Conservation Area, abt 400 yards west of east gate, 52.494, 112.695, 822 m.
- 10C August 2008 – UV, grassland near access trail, abt 150 yards west of east Gate, Buffalo Lake Conservation Area, 52.493, 112.693, 814 m.
- 23A May 2009 – diurnal and UV, silverwillow/buckbrush/pussytoes, Buffalo Lake Conservation Area, 18 km N of Stettler, abt 500 yards west of east gate, 52.494, 112-696, 811 m.
- 23B May 2009 – UV, aspen/buckbrush, Buffalo Lake Conservation Area, abt 400 yards west of east gate, 52.494, 112.695, 822 m.
- 23C May 2009 – UV, aspen/buckbrush near access trail, abt 150 yards west of east Gate, Buffalo Lake Conservation Area, 52.493, 112.693, 814 m.
- 12A June 2009 – UV, silverwillow/buckbrush/pussytoes, Buffalo Lake Conservation Area, 18 km N of Stettler, abt 500 yards west of east gate, 52.494, 112-696, 811 m.
- 12B June 2009 – UV, aspen/buckbrush, Buffalo Lake Conservation Area, abt 400 yards west of east gate, 52.494, 112.695, 822 m.
- 12C June 2009 – UV, aspen/buckbrush near access trail, abt 150 yards west of east Gate, Buffalo Lake Conservation Area, 52.493, 112.693, 814 m.
- 4A June 2010 – UV, silverwillow/buckbrush/pussytoes, Buffalo Lake Conservation Area, 18 km N of Stettler, abt 500 yards west of east gate, 52.494, 112-696, 811 m.
- 4B June 2010 – UV, aspen/buckbrush, Buffalo Lake Conservation Area, abt 400 yards west of east gate, 52.494, 112.695, 822 m.
- 4C June 2010 – UV, aspen/chokecherry/buckbrush, Buffalo Lake Conservation Area, beside east access trail, near highway, 52.493, 112.693, 814 m.