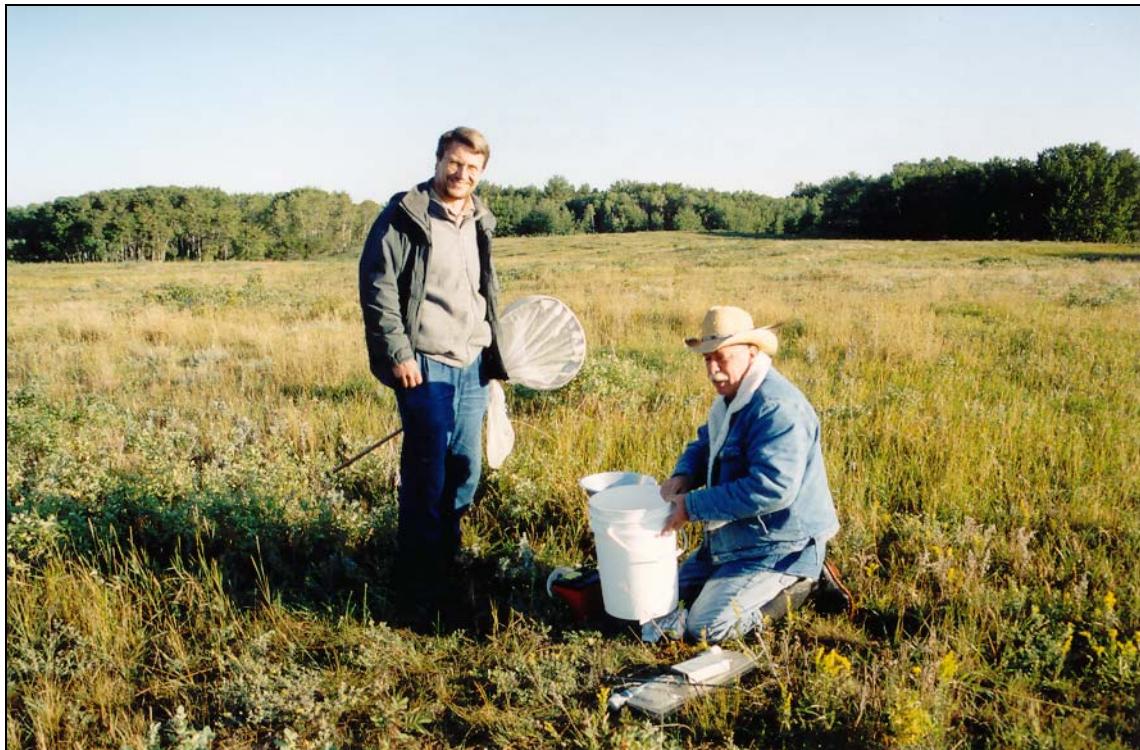


# **MOTHS OF THE BUFFALO LAKE MORAINE CONSERVATION AREA, 2001-2008**

Charles Durham Bird, 8 May 2009  
Box 22, Erskine, AB, T0C 1G0  
[cbird@xplornet.com](mailto:cbird@xplornet.com)

The present paper incorporates the information in previous reports along with that gathered in 2008. It also includes a number of redeterminations and additions to the information in the earlier reports.



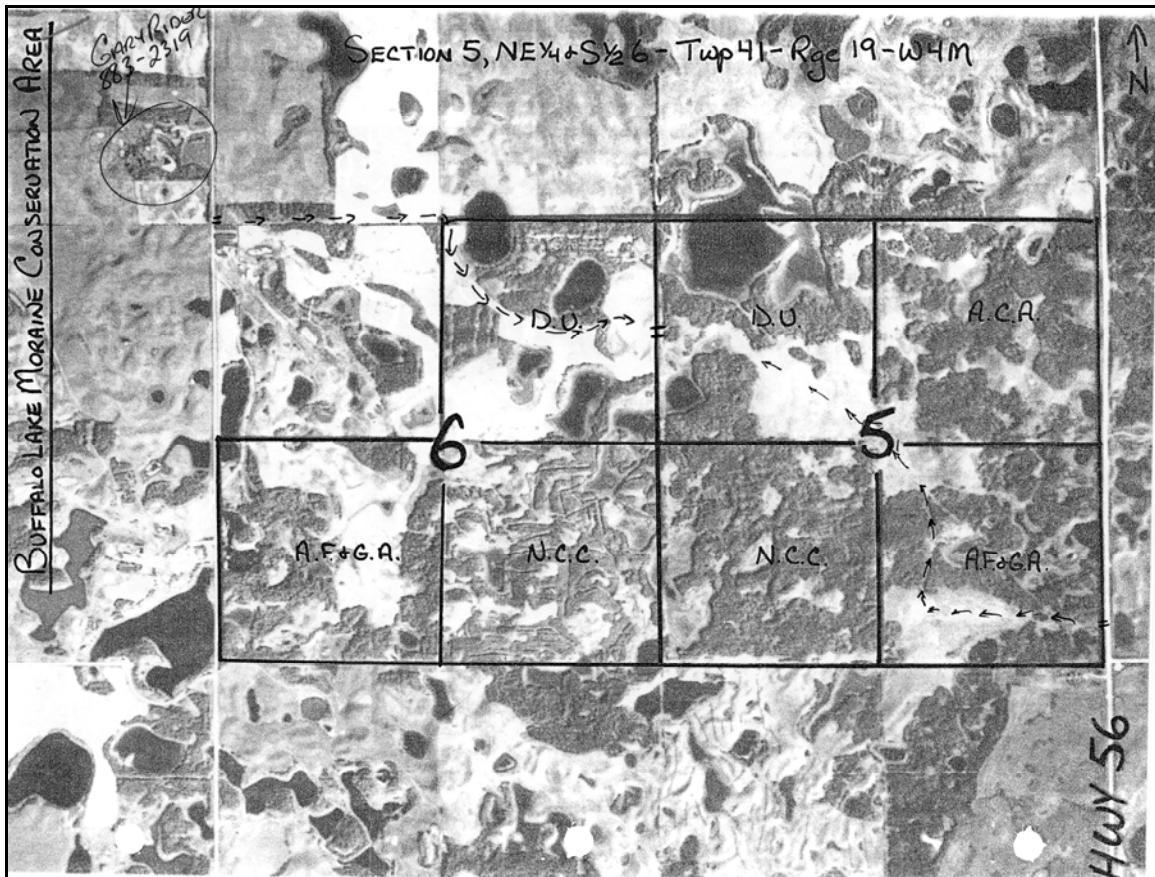
Felix Sperling and Gary Anweiler, Alberta Lepidopterist's Guild members, in the Buffalo Lake Conservation Area, August 18, 2002

## ***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 they will eventually be donated to the Strickland Museum at the University of Alberta, to the Northern Forest Research Centre, and possibly also to the Canadian National Collection.

### **CHECKLIST**

The order, and terminology, is that of R.W. Hodges (1983) except where recent changes in taxonomy have occurred. 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.

The present report incorporates all of the findings in the previous reports (Bird 2001-2006), and includes a number of corrections to previous identifications.

### ***ACANTHOPTEROCTETIDAE – Acanthopteroctetid Moths***

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***

19. *Sthenopsis purpurascens* (Pack.) (Large Ghost Moth) – 15-VII-2001 5, 25-VII-2004 1.

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.

### ***TINEIDAE – Clothes Moths and others***

334. *Amydria effrentella* Clem. – 25-VII-2004 3.  
 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.  
 421. *Monopis spilotella* Tengström – 25-VII-2004 1, 13A-VII-2006 2 and 26B-VI-2007 1.  
 Not in MONA. *Monopis laevigella* (D. & S.) – 4-VI-2004 1.

### ***GRACILARIIDAE – Gracilariid Moths***

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

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

878. *Agonopterix canadensis* (Bsk.) – 10-V-2002 2 and 3A-VIII-2006 1.  
 889. *Agonopterix argillacea* (Wlsm.) – 28-IV-2001 5, 19-V-2002 1 and 9A-IX-2002 1.  
 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.  
 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.  
 912. *Semioscopis packardella* (Clem.) – 4-VI-2004 1, 13A-V-2006 1 and 16B-V-2006 1.  
 914. *Semioscopis inornata* (Wlsm.) – 25-IV-2001 1 and 28-IV-2001 1.  
 915. *Semioscopis megamicrella* Dyar – 25-IV-2001 1, 28-IV-2001 2 and 10-V-2002 1.  
 916. *Semioscopis aurorella* Dyar – 25-IV-2001 1.  
 918. *Depressaria atrostrigella* Clarke – 17-IX-2001 1, 24-IX-2001 1 and 13A-VII-2006 1.  
 926. *Depressaria alienella* Bsk. – 22-VIII-2001 2.  
 1058. *Polix coloradella* (Wlsm.) – 15-VII-2001 1.

### ***ELACHISTIDAE – Elachistid Moths***

Elachista sp. – 23-VI-2002 1, 24C-VI-2006 1 and 19C-VI-2008 1.

### ***BLASTOBASIDAE – Blastobasid Moths***

Holcocera sp. – 4-VIII-2001 1.

1221. Holcocera immaculella McD. – 22-VIII-2001 4, 30-VIII-2001 1, 12-IX-2001 1, 9A-IX-2002 11 and 16B-VIII-2006 1. Little is known about many of the species in this family.  
 1142.1 *Glyphidocera hurlberti* Adamski – 22-VI-2001 1, 27A-VII-2003 3, 20A-V-2005 1, 19B-VI-2005 1 and 24C-V-2006 1.

### ***COLEOPHORIDAE – Coleophorid Moths***

- 1254-1389. Coleophora spp. – 15-VII-2001 1, 4-VIII-2001 2, 22-VIII-2001 1, 23-VI-2002 2, 27-VII-2002 3, 17-VIII-2002 3, 20B-VII-2003 1, 27A-VII-2003 2, 27B-VII-2003 1, 8A-VIII-2003 1, 8B-VIII-2003 2, 4-VI-2004 1, 25-VII-2004 2, 20A-V-2005 1, 24A-VI-2006 1, 24B-VI-2006 1, 13A-VII-2006 1, 13B-VII-2006 1, 3A-VIII-2006 1, 3C-VIII-2006 1, 26B-VI-2007 1, 26D-VI-2007 1, 10A-VIII-2008 1 and 10B-VIII-2008 1. The above specimens are currently with Dr. J.-F. Landry who is doing a North American monograph of the group. Some of the specimens may be of undescribed species.  
 1283. Coleophora cretaticostella Clem. – 7-VI-2001 1.  
 1316. Coleophora rosacella Clem. – 5-VII-2001 1.  
 1367. Coleophora brunneipennis Braun – 29B-VI-2003 2.  
 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.  
 1399. Batrachedra praeangustata (Haw.) – 4-VIII-2001 1 and 22-VIII-2001 1.

### ***MOMPHIDAE – Momphid Moths***

1423. Mompha albapalpella (Cham.) – 21A-VII-2007 1.  
 1457. Mompha tricristatella (Cham.) – 25B-VII-2007 1  
 1458. Mompha unifasciella (Cham.) – 23-VI-2002 1.

### ***COSMOPTERYGIDAE – Cosmopterygid Moths***

1515. Limnaecia phragmitella Staint. – 15-VII-2001 1, 4-VII-2001 5, 12-VIII-2001 1 and 27A-VII-2003 1.

### ***SCYTHRIDIDAE – Scythridid Moths***

- 1646-1680. indet sp. – 28-IV-2001 1, 4-VI-2004 2.  
 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.

### **GELECHIIDAE – Gelechiid Moths**

- 1681-2311. Species unknown – 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 and 19B-VI-2008 2. 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.
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.
1796. Coleotechnites blastovora McLeod – 25-IV-2001 1, 28-IV-2001 1, 7-V-2001 1, 15-V-2001 1, 19-V-2002 1 and 20A-V-2005 1.
- Xenolechia sp. – 15-VII-2001 1.
1880. Xenolechia velatella (Bsk.) – 7-V-2001 1.
1902. Lita variabilis (Bsk.) – 30-VIII-2004 3.
1946. Gelechia lynceela Zell. – 22-VI-2001 2, 15-VII-2001 2, 24B-VI-2006 3 and 26B-VI-2007 1.
- Gnorimoschema sp. – 16B-VIII-2006 2.
1985. Gnorimoschema gallaeasterella (Kellicott) – 9A-IX-2002 1.
1986. Gnorimoschema galaesolidaginis (Riley) – 16A-VIII-2006 1.
2000. Gnorimoschema septentrionella Fyles – 30 VIII-2004 3.
2040. Carycolum casella (Wlk.) – 17-IX-2001 2.
- 2054-2125. Chionodes sp. – 22-VI-2001 1 and 5-VII-2001 1.
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 and 24C-V-2006 4.
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.
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.
2123. Chionodes viduella (F.) – 15-VII-2001 2 and 4-VIII-2001 1.
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 and 19B-VI-2008 1.
2243. Anacampsis niveopulvella (Cham.) – 4-VIII-2001 2.
2267. Helcystogramma (Brachmia) fernaldella (Bsk.) – 27-VII-2002 1, 4-VI-2004 2, 20A-V-2005 2 and 24A-V-2006 1.

2308. *Dichomeris purpureofusca* (Wlsm.) – 12B-VI-2003 1.

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

2313. *Alucita montana* Barnes & Lindsay (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.

### ***EPERMINIIDAE – Eperminiid Moths***

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).

### ***PLUTELLIDAE – Plutellid Moths***

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.

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.

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.

2380. *Ypsolopha falciferella* (Wlsm.) – 7-V-2001 1 and 10-V-2002 1.

### ***ARGYRESTHIIDAE – Argyresthiid Moths***

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

### ***TORTRICIDAE – Tortricid Moths***

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

2706. *Bactra furfurana* (Haw.) – 27B-VII-2003 1.

2707. *Bactra verutana* Zell. (Javelin Moth) – 17-IX-2001 1 and 8B-VIII-2003 1.

2743a. *Endothenia 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.

2753. *Aptomis capreana* (Hbn.) – 15-VII-2001 1 and 4-VIII-2001 1.

2765. *Apotomis deceptana* (Kft.) (Deceptive Apotomis Moth) – 24B-VI-2006 1 and 25B-VII-2007 1.
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.
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.
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.
- Olethreutes inornatana* or *quadrifidus* – 24A-VI-2006 1 and 24B-VI-2006 1.
2835. *Olethreutes galaxana* Kft. – 26B-VI-2007 11.
2848. *Olethreutes bipartitana* (Clem.) (Divided Olethreutes Moth) – 22-VI-2001 2 and 13A-VII-2006 1.
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.
2862. *Hedya nubiferana* (Haw.) - 4-VIII-2001 5, 27-VII-2002 1 and 8A-VIII-2003 1
2913. *Phaneta umbrastriana* (Kft.) – 31-V-2001 1.
2926. *Phaneta verna* Miller – 26A-V-2007 1.
2932. *Phaneta alterana* (Heinr.) – 15-VII-2001 1.
2933. *Phaneta marmontana* (Kft.) – 15-VII-2001 1, 24B-VI-2006 3 and 24C-VI-2006 2.
2937. *Phaneta parmatana* (Clem.) – 25-VII-2004 1.
2940. *Phaneta convergana* (McD.) – 29-V-2002 1.
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.
2965. *Phaneta fertoriana* (Heinr.) – 29B-VI-2003 2 and 19A-VI-2005 1.
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.
2973. *Phaneta striatana* (Clem.) – 15-VII-2001 1, 27B-VII-2003 2 and 10A-VIII-2008 1.
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.
2985. *Phaneta infimbriana* (Dyar) – 4-VIII-2001 1, 27A-VII-2003 1, 25-VII-2004 4 and 13A-VII-2006 1.
2986. *Phaneta octopunctana* (Wlsm.) – 15-VII-2001 2 and 25-VII-2004 1.
3005. *Phaneta effectalis* (Hulst) – 23-VI-2002 1, 24B-V-2006 4, 24C-V-2006 6 and 13A-VII-2006 2.
3014. *Eucosma ridingsana* (Rob.) (Riding's Eucosma Moth) – 4-VIII-2001 3, 27A-VII-2003 3, 8A-VIII-2, 25-VII-2004 4 and 3A-VIII-2006 1.
3031. *Eucosma serpentana* (Wlsm.) – 4-VIII-2001 1.

3035. *Eucosma morrisonii* (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.
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.
3116. *Eucosma dorsisignatana* (Clem.) (Triangle-backed Eucosma Moth) – 16B-VIII-2006 1 and 10A-VIII-2008 2.
- 3116.2. *Eucosma similiana* (Clem.) – 9A-IX-2002 1, 3B-VIII-2006 1 and 16C-VIII-2006 1.
3119. *Eucosma juncticiliiana* (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.
3142. *Eucosma catalystiana* (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.
3209. *Notocelia purpurissitana* Henir. – 25B-VII-2007 1.
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.
3223. *Gypsonoma fasciolana* (Clem.) – 31-V-2001 2, 22-VI-2001 1, 23-VI-2002 1 and 4-VI-2004 2.
3227. *Gypsonoma substitutionis* Heinr. – 24A-VI-2006 2, 24B-VI-2006 2, 13A-VII-2006 1 and 10B-VIII-2008 1.
3248. *Pseudexentera oregonana* (Wlsm.) (Early Aspen Leafroller) – 1-IV-2001 2, 25-IV-2001 2 and 10-V-2002 1.
3276. *Rhopobota naevana* (Haw.) – 24-IX-2001 1.
3288. *Epinotia castaneana* (Wlsm.) – 24A-VI-2006 3 and 24B-VI-2006 3.
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.
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.
3342. *Epinotia lomonana* (Kft.) – 17-IX-2001 1 and 9A-IX-2002 2.
3351. *Epinotia lindana* (Fern.) (Diamondback Epinotia Moth) – 16C-VIII-2006 2.
3355. *Ancylis subaequana* (Zell.) – 19B-VI-2008 1.
3465. *Cydia flexiloqua* (Heinr.) – 25-VII-2004 1.
3374. *Ancylis comptana* (Frölich) (Strawberry Leafroller) – 23-VI-2002 1.
3384. *Ancylis mediofasciana* (Clem.) – 20A-V-2005 1 and 24A-V-2006 1.
3391. *Hystrichophora stygiana* (Dyar) – 22-VI-2001 1.
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.
3506. *Acleris macdunnoughi* Obr. – 17-IX-2001 2.
3525. *Acleris forbesana* (McD.) – 24C-V-2006 2.
3529. *Acleris oxycoccana* (Pack.) – 17-IX-2001 14 and 24-IX-2001 3.
3536. *Acleris robinsoniana* (Fbs.) – 22-VIII-2001 2, 30-VIII-2001 2, 17-VIII-2002 1, 3A-VIII-2006 1, 16B-VIII-2006 1 and 10C-VIII-2008 1.
3553. *Acleris bowmanana* (McD.) – 24-IX-2001 1.

3556. *Acleris nigrolinea* (Rob.) – 28-IV-2001 1, 15-V-2001 1 and 10-V-2002 2.
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.
3580. *Decodes hororianus* (Wlsm.) – 17-IX-2001 12 and 24-IX-2001 2.
3589. *Anopina wellingtoniana* (Kft.) – 24B-VI-2006 1.
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.
3621. *Argyrotaenia quadrifasciana* (Fern.) (Lesser All-green Leafroller Moth) – 10B-VIII-2008 1.
3625. *Argyrotaenia mariana* (Fern.) – 20A-V-2005 1 and 26A-VI-2007 1.
3635. *Choristoneura rosaceana* (Harr.) – 15-VII-2001 1, 4-VIII-2001 1, 24A-VI-2006 1 and 13A-VII-2006 2.
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).
3638. *Choristoneura fumiferana* (Clem.) (Spruce Budworm Moth) – 10A-VIII-2008 1 and 10B-VIII-2008 1.
3648. *Archips argyrospila* (Wlk.) (Fruite Tree Leafroller Moth) – 25-VII-2004 3.
3661. *Archips cerasivorana* (Fitch) (Ugly Nest Caterpillar Moth) – 10A-VIII-2008 1, 10B-VIII-2008 1 and 10C-VIII-2008 1.
3672. *Syndemis afflictana* (Wlk.) (Gray Leafroller or Black-and-gray Banded Leafroller Moth) – 24A-V-2006 1.
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.
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.
3684. *Clepsis clemensiana* (Fern.) (Clemen's Clepsis Moth) – 15-VII-2001 2, 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.
3688. *Ptycholoma peritana* (Clem.) – 15-VII-2001 1, 20B-VII-2003 2, 27A-VII-2003 1, 25-VII-2004 1 and 30-VIII-2004 1.
3689. *Ptycholoma virescana* (Clem.) – 4-VIII-2001 1, 30-VIII-2001 1, 17-VIII-2002 2, 25-VII-2004 1, 13A-VII-2006 2, 3A-VIII-2006 1 and 10A-VIII-2008 1.
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.
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.
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.
3712. *Sparganothis vocaridorsana* Kft. – 19B-VI-2005 1 and 12B-VI-2006 2.

3720. *Sparganothis reticulatana* (Clem.) (Reticulated Fruitworm Moth) – 4-VIII-2001 1,  
13A-VII-2006 1, 27B-VII-2006 2 and 25A-VII-2007 1.  
3740. *Platynota idaeusalis* (Wlk.) (Tufted Apple Bud Moth) – 27-VII-2002 1.

### ***COCHYLIDAE – Cochylid Moths***

Species indet. – 30-VIII-2001 1.

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.

3755. *Aethes smeachmanniana* (F.) – 5-VII-2001 1 and 26B-VI-2007 1.  
3787. *Phtheochroa (Carolella) vitellinana* (Zell.) – 22-VI-2001 1 and 24B-VI-2006 1.  
3792. *Phtheochroa fulviplicana* (Wlsm.) – 5-VII-2000 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.  
3796. *Phtheochroa waracana* (Kft.) – 15-VII-2001 1 and 27B-VII-2003 1.

### ***HESPERIIDAE – Skippers***

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

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

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

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

4375. *Lycaeides melissa* (Edw.) – 18-VI-2004 1.  
4376. *Plebejus saepiolus* (Bdv.) (Greenish Blue) – 26A-VI-2007 1.

### ***NYMPHALIDAE – Fritillaries***

4435. *Vanessa cardui* (L.) (Painted Lady) – 19A-VI-2005 1.  
4465b. *Boloria bellona* (Fabr.) (Meadow Fritillary) – 26A-V-2007 2.

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

4596. *Erebia discoidalis* (Kby.) (Red-disked Alpine) – 26A-V-2007 1.  
4608. *Oeneis alberta* Elwes (Alberta Arctic) – 26A-V-2007 1.

### ***PYRALIDAE – Snout or Pyralid Moths***

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.

4759. *Parapoynx maculalis* (Clem.) (Polymorphic Pondweed Moth) – 15-VII-2001 1.
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.
4950. *Fumibotys fumalis* (Gn.) – 25-VII-2004 1.
4951. *Perispasta caeculalis* Zell. – 24-VI-2002 3 and 19B-VI-2005 1.
4957. *Mutuuraia mysippusalis* (Wlk.) – 15-VII-2001 1 and 24B-VI-2006 1.
4987. *Sitochroa chortalis* (Grt.) – 23-VI-2002 1, 29B-VI-2003 1 and 19B-VI-2005 1.
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.
5017. *Loxostege cereralis* (Zell.) (Alfalfa Webworm Moth) – 25-VII-2004 1.
5032. *Pyrausta nicalis* (Grt.) – 15-VII-2001 1.
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.
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.
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.
5075. *Pyrausta socialis* (Grt.) – 15-VII-2001 2.
5128. *Choristostigma plumbosignalis* (Fern.) – 13A-VII-2006 1.
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.
5137. *Mecyna mustelinalis* (Pack.) – 15-VII-2001 1.
5316. *Donacaula melinella* (Clem.) – 15-VII-2001 1. This specimen has been sent for study to Edda Martinez at the Mississippi Entomological Museum as she is monographing the North American species of the genus.
5319. *Donacaula longirostrella* (Clem.) – 20A-VII-2003 1. This specimen has been sent for study to Edda Martinez at the Mississippi Entomological Museum as she is monographing the North American species of the genus.
- 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.
5344. *Crambus unistriatellus* Pack. – 17-VIII-2002 1 and 27B-VII-2003 1.
5345. *Crambus whitmerellus browni* Klots – 22-VI-2001 3 and 19-VI-2004 1.
- 5354/5357. *Crambus ainsliellus* Klots/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.
5365. *Crambus girardellus* Clem. – 22-VI-2001 3, 17-VIII-2002 1 and 29B-VI-2003 1.

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.
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.
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 .
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.
- 5410-5417. *Pediasia* sp. – 22-VIII-2001 1, 27A-VII-2003 1, 25-VII-2004 1. Included here could be *Pediasia aridella edmontella*, *laciiniellus*, or even an undescribed species.
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.
5415. *Pediasia ericella* (B. & McD.) – 17-VIII-2002 2, 10A-VII-2003 1 and 10B-VII-2003 1.
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.
- 5439b. *Thaumatopsis pexella coloradella* Kft. – 30-VIII-2001 1.
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.
5533. *Herculia olinalis* (Gn.) (Yellow-fringed Dolichomia Moth) – 25-VII-2004 1.
5606. *Tetralopha asperatella* (Clem.) (Maple Webworm Moth) – 24B-VI-2006 1 and 13A-VII-2006 2.
5655. *Acrobasis tricolorella* Grt. (Tricolored Acrobasis Moth) – 25-VII-2004 1, 13A-VII-2006 1 and 10C-VIII-2008 1.
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.
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.
5787. *Meroptera pravella* (Grt.) (Lesser Aspen Webworm) – 4-VIII-2001 1, 23-VI-2002 1, 24A-V-2006 1, 24C-VI-2006 1 and 24B-VI-2006 1.
5799. *Nephopterix basilaris* Zell. – 23-VI-2002 1, 24B-VI-2006 1 and 24C-VI-2006 1.
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.
5824. *Pyla aequivoca* Heinr. – 13A-VII-2006 1.
5827. *Pyla aenigmatica* Heinr. – 15-VII-2001 1.
5841. *Dioryctria abietivorella* (Grt.) (Evergreen Coneworm Moth) – 10B-VIII-2008 2.
5870. *Sarata cauderella* (Dyar) – 9-VIII-2002 1.
5918. *Hulstia undulatella* (Clem.) – 30A-VIII-2003 1.

5968. *Zophodia grossulariella* (Hbn.) (*Z. 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 and 24C-V-2006 2.
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.

### ***PTEROPHORIDAE – Plume Moths***

- 6089-6234. 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.
6107. *Gillmeria pallidactyla* (Haw.) – 24-VI-2006 6.
6166. *Oidaematophorus mathewianus* (Zell.) (Mathew's Plume Moth) – 27-VII-2002 1, 27-VII-2003 1 and 13-VII-2006 7.
6185. *Oidaematophorus brucei* (Fern.) – 20-VII-2003 1.
6203. *Hellinsia homodactylus* (Wlk.) – 27-VII-2002 1.
6205. *Hellinsia pectodactylus* (Staudinger) – 13-VII-2006 3.
6232. *Hellinsia arion* (B. & L.) – 20-VII-2003 1.

### ***THYATIRIDAE – Thyatirid Moths***

6235. *Habrosyne scripta* (Gosse) (The Scribe or The Lettered Habrosyne) – 24A-VI-2006 1.
6240. *Euthyatira pudens* (Gn.) (Dogwood Thyatirid) – 28-IV-2001 1 and EM, 15-V-2001 1, 19-V-2002 1.
6248. *Ceranemota albertae* Clarke (Alberta Lutestring) – 9A-IX-2002 1 and 30-VIII-2004 1.

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

6270. *Protitame virginalis* (Hulst) (Virgin Moth) – 23-VI-2002 1 and 4-VI-2004 3.
6279. *Macaria (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.
6283. *Macaria (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.
6290. *Macaria 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.
6304. *Macaria (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.

6373. *Digrammia (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.
6380. *Digrammia (Semiothisa) californaria* (Pack.) – 8A-VIII-2003 1, 8B-VIII-2003 1 and 25-VII-2004 1.
6394. *Digrammia rippertaria* (Dup.) (*Semiothisa hebetata*) – 4-VI-2004 1.
6396. *Digrammia (Semiothisa) neptaria* (Gn.) – 4-VI-2004 1.
6397. *Digrammia (Semiothisa) mellistrigata* (Grt.) – 15-VII-2001 1.
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.
6651. *Lycia ursaria* (Wlk.) (The Bear or Stout Spanworm Moth) – 25-IV-2001 6, 28-IV-2001 1 and 10-V-2002 2.
6665. *Erannis tiliaria* (Harr.) (Linden Looper Moth) – 24-IX-2001 1 and 27-IX-2001 2.
6666. *Lomographa semiclarata* (Wlk.) (Bluish Spring Moth) – 26A-V-2007 2.
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.
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.
6715. *Aspitates aberratus* (Hy. Edw.) – 24C-V-2006 1.
6726. *Euchlaena obtusaria* (Hbn.) (Obtuse Euchlaena) – 24A-VI-2006 1, 24B-VI-2006 1 and 24C-VI-2006 1.
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.
6734. *Euchlaena marginaria* (Minot) (Maple Spanworm) – 3-V-2001 1, 22-VI-2001 1, 24A-V-2006 1 and 24C-V-2006 1.
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.
6740. *Xanthotype urticaria* Swett – 24A-VI-2006 1.
6743. *Xanthotype sospeta* (Drury) (Crocus Geometer) – 24B-VI-2006 1 and 24C-VI-2006 1.
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 and 26B-VI-2007 1.
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.
6797. *Ennomos magnaria* Gn. (Maple Spanworm) – 17-IX-2001 1, 17-VIII-2002 1, 9A-IX-2002 1 and 9B-IX-2002 1.
6817. *Selenia alciphearia* Wlk. (Northern Selenia) – 25-IV-2001 1, 29-V-2002 1 and 29-V-2008 1.
- 6817/6818. *Selenia alciphearia* or *kentaria* – 20A-V-2005 1.
6818. *Selenia kentaria* (G. & R.) (Kent's Geometer) – 29-V-2002 1.

6819. *Metanema inatomaria* Gn. (Pale Metanema) – 12-VI-2001 1, 23-VI-2002 1 and 24B-VI-2006 1.
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 and 19B-VI-2008 1.
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 and 29-V-2008 5.
6836. *Anagoga occiduaria* (Wlk.) (American Barred Umber) – 7-VI-2001 1, 4-VI-2004 1 and 24A-V-2006 1.
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.
6838. *Probola amicaria* (H.-S.) (Friendly Probola) – 22-VI-2001 1, 4-VI-2004 1, 24C-V-2006 1 and 24A-VI-2006 1.
6842. *Plagodis phlogosaria* (Gn.) (Straight-lined Plagodis) – 29-VI-2002 1, 24B-V-2006 1 and 24C-V-2006 1.
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.
6954. *Synaxis jubaria* (Hulst) (October Thorn) – 17-IX-2001 1.
6963. *Tetracis crocallata* Gn. (White Slant-line) – 4-VI-2004 1 and 20B-VI-2007 1.
6982. *Prochoerhodes 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.
7009. *Nematocampa resistaria* (H.-S.) (Horned Spanworm Moth) – 25-VII-2004 1, 13A-VII-2006 1 and 10C-VIII-2008 1.
7018. *Nemoria unitaria* (Pack.) – 15-VII-2001 2 and 25-VII-2004 1.
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.
7085. *Mesothea incertata* (Wlk.) (Plain Emerald) – 26A-V-2007 1.
7159. *Scopula limboundata* (Haw.) (Large Lace-border) – 10B-VIII-2008 1.
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.
7166. *Scopula frigidaria* Mösch. (Frigid Wave) – 24-IX-2001 1, 19A-VI-2005 1 and 19B-VI-2005 1.
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.
7182. *Dysstroma citrata* – 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.
7187. *Dysstroma truncata* (Hufn.) (Marbled Carpet) – 13A-VII-2006 2.
7189. *Dysstroma hersiliata* (Gn.) (Orange-barred Carpet) – 24A-VI-2006 1, 24B-VI-2006 3 and 26C-VI-2007 1.
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.

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.
7205. *Eulithis flavibrunneata* (McD.) – 22-VIII-2001 1, 3A-VIII-2006 1, 3B-VIII-2006 1 and 3C-VIII-2006 1.
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.
7213. *Ecliptoptera silaceata* (D. & S.) – 24A-VI-2006 1.
7216. *Plemyria georgii* Hulst (Eyed Carpet) – 4-VIII-2001 1.
7229. *Hydriomena perfracta* Swett (Marbled Carpet) – 24C-V-2006 1.
7254. *Hydriomena ruberata* (Frey.) – 24A-V-2006 1 and 29-V-2008 1.
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.
7316. *Perizoma basaliata* (Wlk.) (Twin-spot Wave) – 24A-V-2006 1, 24A-VI-2006 1 and 24C-VI-2006 1.
7329. *Anticlea vasiliata* Gn. (Variable Carpet) – 7-V-2001 1, 10-V-2002 1 and 29-V-2002 1.
7384. *Xanthorhoe decoloraria* (Esper) (American Carpet) – 27-VII-2002 1 and 25-VII-2004 1.
7388. *Xanthorhoe ferrugata* (Cl.) (Red Twin-spot) – 23-VI-2002 1 and 26C-VI-2007 1 and 19A-VI-2008 2..
7390. *Xanthorhoe lacustrata* (Gn.) (Toothed Brown Carpet) – 15-VII-2001 1.
- n.n. *Xanthorhoe decoloraria* (Esper) – 13A-VII-2006 1.
7394. *Epirrhoa alternata* (Müller) (White-banded Toothed Carpet) – 24A-VI-2006 1, 24B-VI-2006 1 and 13A-VII-2006 1.
- 7399a. *Euphyia intermediata* (Gn.) (Sharp-angled Carpet) – 26A-VI-2007 1.
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.
7414. *Orthonama obstipata* (F.) – 17-IX-2001 1.
7423. *Hydrelia albifera* (Wlk.) (Fragile White Carpet) – 26A-VI-2007 1.
7433. *Epirrita autumnata* (Bkh.) (Autumn Moth) – 9A-IX-2002 1.
7445. *Horisme intestinata* (Gn.) (Brown Bark Carpet) – 22-VI-2001 1, 23-VI-2002 1, 24C-V-2006 1 and 24B-VI-2006 1.
7446. *Horisme incana* Swett – 3-V-2001 1.
- Eupithecia* spp. (Pugs) – 26B-VI-2007 2 and 19A-VI-2008 1.
7483. *Eupithecia regina* Tayl. – 24A-VI-2006 1 and 24B-VI-2006 1.
7487. *Eupithecia subfuscata* (Haw.) – 23-VI-2002 1, 24A-V-2006 1.
- 7520c. *Eupithecia satyrata dodata* Tayl. – 31-V-2001 1 and 4-VI-2004 1.
7528. *Eupithecia assimilata* Dbld. – 24A-V-2006 1 and 13A-VII-2006 1.
7548. *Eupithecia lachrymosa* (Hulst) – 21-VI-2005 1.
7549. *Eupithecia anticaria* Wlk. – 24A-V-2006 2, 24B-V-2006 1.
- 7551a. *Eupithecia interruptofasciata* Pack. – 27A-VIII-2006 1 5.
7594. *Eupithecia anticaria* Wlk. – 31-V-2001 3, 23-VI-2002 3, 24A-V-2006 1, 24B-V-2006 1 and 24A-VI-2006 1.
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.

7605. *Eupithecia ravocostaliata* Pack. (Great Variegated Pug) – 25-IV-2001 1, 29-V-2002 2. 20A-V-2005 1 and 26A-V-2005 1.
7640. *Lobophora nivigerata* Wlk. (Two-lined Aspen Looper) – 23-VI-2002 1 and 21-VI-2005 1, 24C-V-2006 1 and 24B-VI-2006 1.
7643. *Lobophora magnoliotidata* (Dyar) – 23-VI-2002 1.

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

7687. *Phyllodesma americana* (Harr.) (Lappet Moth) – 28-IV-2001 1, 29-V-2002 1 and 29-V-2008 2.
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).
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 Silkmoth Moths***

7757. *Antheraea polyphemus* (Cram.) (Polyphemus Moth) – 22-VI-2001 1 and 4-VI-2004 1.
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***

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 and 29-V-2008 1.
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.
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 and 29-V-2008 1.
7824. *Paonias excaecatus* (J.E. Smith) (Blinded Sphinx) – 7-VI-2001 1, 15-VII-2001 1, 26C-VI-2007 1 and 26D-VI-2007 2.
7825. *Paonias myops* (J.E. Smith) (Small-eyed Sphinx) – 22-VI-2001 1 and 23-VI-2002 1.
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.
7893. *Hyles gallii* (Rottemburg) (Bedstraw Hawkmoth) – 29A-VI-2003 1, 4-VI-2004 1, 20A-V-2005 1 and 24C-VI-2006 1.
7894. *Hyles lineata* (F.) (White-lined Sphinx) – 30-VIII-2001 1.

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

7895. *Clostera 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 and 4-VI-2004 1.
7898. *Clostera strigosa* (Grt.) (Striped Chocolate-tip) – 26C-VI-2007 1.
7900. *Clostera 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.
7901. *Clostera 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 and 29-V-2008 2.
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.
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 and 29-V-2008 1.
7924. *Odontosia elegans* (Stkr.) (Elegant Prominent) – 22-VI-2001 2 and 19A-VI-2008 1.
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. Now regarded as synonymous with the Old World *Notodonta torva* (Hübner).
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 and 24B-VI-2006 1.
7934. *Gluphisia lintneri* (Grt.) (Lintner's Pebble) – 25-IV-2001 1 and 28-IV-2001 1.
7940. *Furcula scolopendrina* (Bdv.) (Poplar Kitten) – 24B-VI-2006 1.
7941. *Furcula modesta* (Huds.) (Modest Kitten) – 29-V-2002 1 and 3A-VIII-2006 1.
8007. *Schizura unicornis* (J.E. Smith) (Variegated Prominent or Unicorn Caterpillar Moth) – 23-VI-2002 1, 25-VII-2004 1 and 24B-VI-2006 1.

## ***ARCTIIDAE - Tiger Moths and others***

8043. *Eilema bicolor* (Grt.) (Bicolored Moth) – 25-VII-2004 1.
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.
8089. *Hypoprepia miniata* (Kby.) (Scarlet-winged Lichen Moth) – 15-VII-2001 2 and 25-VII-2004 1.
8098. *Clemensia albata* Pack. (Little White Lichen Moth) – 25D-VII-2007 1.
8111. *Haploa lecontei* (Guér.-Méneville) (Leconte's Haploa) – 15-VII-2001 1.
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.
8129. *Pyrrharctia isabella* (J.E. Smith) (Isabella Tiger Moth) – 22-VI-2001 1, 23-VI-2002 1 and 19B-VI-2008 1.
8131. *Estigmene acraea* (Drury) (Salt Marsh Moth) – 24B-V-2006 1 and 26C-VI-2007 1.

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.
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 and 29-V-2008 2.
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.
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.
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.
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 and 26C-VI-2007 1.
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.
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.
8214. *Lophocampa maculata* Harr.) (Spotted Tussock Moth) – 15-VII-2001 1, 24B-V-2006 1 and 24B-VI-2006 1.
8262. *Ctenucha virginica* (Esp.) (Virginia Ctenucha) – 22-VI-2001 1 and 23-VI-2002 1.

### ***LYMANTRIIDAE – Tussock Moths***

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.

### ***NOCTUIDAE – Owlets or Noctuid Moths***

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.
8323. *Idia aemula* Hbn. (Powdered Snout) – 25-VII-2004 1.
8354. *Zanclognatha latalba* (Sm.) (The Canadian Zanclognatha) – 15-VII-2001 1 and 10B-VIII-2008 1.
8356. *Chytolita petrealis* Grt. – 15-VII-2001 1 and 29B-VI-2003 1.
8359. *Macrochilo bivittata* (Grt.) – 15-VII-2001 3 and 25-VII-2004 1.
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.

8370. *Bleptina caradrinalis* Gn. (Variable Snout Moth or Bent-winged Owlet) – 24B-VI-2006 1.
8397. *Palthis angulalis* (Hbn.) (Angulated Snout Moth or Dark-spotted Palthis) – 22-VI-2001 2, 24B-VI-2006 1 and 26A-VI-2007 1.
8404. *Rivula propinqualis* Gn. (Yellow Snout Moth) – 13A-VII-2006 2.
8413. *Mycterophora inexplicata* (Wlk.) (Pale-edged Snout Moth) – 13A-VII-2006 1.
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.
8632. *Drasteria hudsonica* (G. & R.) – 29A-VI-2003 1.
8697. *Zale minerea* (Gn.) (Colorful Zale) – 29-V-2002 5, 20A-V-2005 2, 24A-V-2006 1, 24B-V-2006 1 and 29-V-2008 2.
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 and 26A-V-2007 1.
8739. *Caenurgina erechtea* (Cram.) (Forage Looper Moth) – 27-VII-2002 1 and 3A-VIII-2006 1.
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.
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.
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.
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.
8867. *Catocala blandula* Hulst (Charming Underwing) – 3B-VIII-2006 1 and 10B-VIII-2008 1.
8881. *Abrostola urentis* Gn. (Variegated Brindle) – 24A-VI-2006 1 and 13A-VII-2006 1.
8887. *Trichoplusia ni* (Hbn.) (Cabbage Looper Moth) – 17-IX-2001 1.
8896. *Diachrysia aeroides* (Grt.) (Dark-spotted Looper Moth) – 15-VII-2001 1, 22-VII-2002 1 and 25-VII-2004 1.
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.
8905. *Eosphoropteryx thyatyroides* (Gn.) (Pink-patched Looper or Pink-patched Beauty) – 10B-VIII-2008 1.
8911. *Autographa bimaculata* (Steph.) (Two-spotted Looper Moth) – 15-VII-2001 1, 13A-VII-2006 2 and 10B-VIII-2008 1.
8914. *Autographa californica* (Speyer) (Alfalfa Looper Moth) – 15-VII-2001 1 and 24-IX-2001 1.
8916. *Autographa flagellum* (Wlk.) – 24B-VI-2006 1.
8923. *Autographa ampla* (Wlk.) – 20B-VII-2003 1, 24B-VI-2006 1 and 24C-VI-2006 1.
8924. *Anagrapha falcifera* (Kby.) – 12A-VI-2003 1, 12B-VI-2003 1, 8A-VIII-2003 1, 19A-VI-2005 1, 26D-VI-2007 1 and 29-V-2008 1.
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.

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.
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.
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 and 19A-VI-2008 1.
9053. *Pseudostrotia carneola* (Gn.) (Pink-barred Lithacodia) – 10B-VIII-2008 1.
9085. *Tarachidia semiflava* (Gn.) – 20A-VII-2003 1, 31-V-2005 1 and 19A-VI-2005 2.
9112. *Therasea flavicosta* (Sm.) (Narrow-winged Midget) – 4-VI-2004 1.
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 and 24B-VI-2006 1.
9212. *Acronicta grisea* (Wlk.) (Gray Dagger Moth) – 24B-V-2006 1 and 24C-VI-2006 1.
9226. *Acronicta superans* Gn. (The Chieftain Dagger Moth) – 22-VI-2001 1 and 23-VI-2002 2.
9228. *Acronicta furcifera* Gn. (The Forked Dagger Moth) – 24B-VI-2006 1 and 26B-VI-2007 1.
9241. *Acronicta fragilis* (Gn.) (Fragile Dagger Moth) – 31-V-2001 1 and 24C-V-2006 1.
9257. *Acronicta impleta* Wlk. (Yellow-haired Dagger Moth) – 29-V-2002 1.
9261. *Acronicta impressa* Wlk. (Willow Dagger Moth) – 24A-V-2006 1, 13A-VII-2006 1 and 3B-VIII-2006 1.
9272. *Acronicta oblinita* (J.E. Smith) (Smeared Dagger Moth) – 31-V-2001 1 and 4-VI-2004 3.
9280. *Simyra henrici*(Grt.) (Henry's Marsh Moth) – 26B-VI-2007 1 and 19A-VI-2008 1.
9341. *Apamea vultuosa* (Grt.) (Narrow-bordered Quaker or Airy Quaker) – 24B-VI-2006 1.
9348. *Apamea amputatrix* (Fitch) (Northern Quaker or Dusky Sallow) – 22-VI-2001 1, 27A-VII-2003 1 and 25-VII-2004 1.
9351. *Apamea alia* (Gn.) (Dewy Quaker) – 24B-VI-2006 1, 24C-VI-2006 1 and 13A-VII-2006 1.
9359. *Apamea commoda* (Wlk.) (Southern Quaker) – 5-VII-2001 2, 15-VII-2001 2, 25-VII-2004 1 and 13A-VII-2006 1.
9362. *Apamea remissa* (Hbn.) (A. indocilis) (Ignorant Apamea) – 24C-VI-2006 1.
9364. *Apamea sordens* (Hufn.) (was A. finitima) (Bordered Apamea) – 7-VI-2001 4, 4-VI-2004 2, 19A-VI-2005 1, 24A-V-2006 1 and 24C-V-2006 1.
9365. *Agroperina lateritia* (Hufn.) (now *Apamea scoparia* (Hufn.)) (Red-winged Quaker) – 5-VII-2001 1 and 15-VII-2001 1.
9367. *Agroperina cogitata* (Sm.) (A. dubitans) (Ruby Quaker) – 15-VII-2001 1, 22-VIII-2001 1, 13A-VII-2006 1, 25B-VII-2007 1 and 10B-VIII-2008 1.
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.
9374. *Apamea niveivenosa* (Grt.) (White-veined Quaker) – 15-VII-2001 2 and 17-VIII-2002 1.

9382. *Apamea 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.
9396. *Eremobina claudens* (Wlk.) (Alberta Quaker) – 28-VIII-2001 1, 9A-IX-2002 1, 16B-VIII-2006 1 and 16C-VIII-2006 1.
- 9412.1. *Oligia subjuncta* (Sm.) (*A. laevigata*) (Short-cloaked Quaker) – 15-VII-2001 1, 17-VIII-2002 1, 25-VII-2004 1, 13A-VII-2006 1 and 10A-VIII-2008 1.
9417. *Oligia egens* (Wlk.) (Neomogen's Quaker) – 22-VIII-2001 1, 9B-IX-2002 1, 25B-VII-2007 1 and 25D-VII-2007 1.
9419. *Oligia mactata* (Gn.) (Prairie Quaker) – 22-VIII-2001 5, 30-VIII-2001 1 and 9A-IX-2002 1.
9420. *Oligia illocata* (Wlk.) (Wandering Quaker) – 22-VIII-2001 1 and 24-IX-2001 1.
9431. *Parastichtis suspecta* (Wlk.) (Mottled Quaker) – 27-VII-2002 1 and 10A-VIII-2008 1.
9434. *Spartiniphaga includens* (Wlk.) (Silver-C Borer) – 17-VIII-2002 2, 27B-VII-2003 2 and 3B-VIII-2006 1.
9437. *Chortodes inquinata* (Gn.) (Sordid Wainscot) – 27-VII-2002 1, 17-VIII-2002 1 and 25-VII-2004 1.
9440. *Chortodes rufostrigata* (Pack.) (Brown-streaked Rustic) – 22-VIII-2001 1, 27-VII-2002 1, 25-VII-2004 1 and 24C-VI-2006 1.
9443. *Chortodes defecta* (Grt.) (Narrow-winged Borer) – 25-VII-2004 1.
9450. *Archanaara subflava* (Grt.) (Subflava Sedge Borer) – 9A-IX-2002 1, 25C-VII-2007 1, 10A-VIII-2008 1 and 10B-VIII-2008 1.
9453. *Helotropha reniformis* (Grt.) (now *Celaena reniformis*) (Kidney-spotted Rustic) – 24-IX-2001 1 and 17-VIII-2002 1.
9456. *Amphipoea interoceanica* (Sm.) – 4-VIII-2001 1.
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*.
9472. *Papaipema harrisii* (Grt.) (Cow Parsnip Borer Moth) – 16C-VIII-2006 1.
9515. *Hydraecia peroobliqua* Hamp. (Oblique Rustic) – 22-VIII-2001 1, 30-VIII-2001 2, 17-IX-2001 2, 26-VIII-2002 1 and 11-IX-2002 2.
9525. *Bellura obliqua* (Wlk.) (Cattail Borer Moth) – 7-VI-2001 2, 22-VI-2001 3, 15-VII-2001 1, 23-VI-2002 1 and 26C-VI-2007 1.
9545. *Eplexia benesimilis* McD. (American Angle Shades) – 24C-V-2006 1.
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.
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.
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.
9564. *Andropolia contacta* (Wlk.) – 17-VIII-2002 1 and 25B-VII-2007 1.

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 and 19C-VI-2008 1.
9656. *Platyperigea extima* (Wlk.) (now *P. montana*) (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.
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.
9875. *Xylena thoracica* (Putnam-Cramer) (Gray Swordgrass Moth) – 10-V-2002 1 and 13A-V-2006 1.
9876. *Xylena cineritia* (Grt.) (Western Swordgrass Moth) – 25-IV-2001 4, 28-IV-2001 1, 28-IV-2001 (EM) and 10-V-2002 1.
9579. *Hyppa contrasta* McD. (H. nr *xylinoides*) (Common Hyppa or Cranberry Cutworm) – 24A-V-2006 1 and 24B-VI-2006 1.
9878. *Lithomoia germana* (Morr.) (American Peasant) – 16C-VIII-2006 1.
9881. *Homoglaea hircina* Morr. (Goat Sallow) – 25-IV-2001 4, 28-IV-2001 4 and 10-V-2002 2.
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.
9888. *Lithophane innominata* (Sm.) (Nameless Pinion) – 28-IV-2001 1.
9935. *Eupsilia tristigmata* (Grt.) (Three-spotted Sallow) – 10-V-2002 1.
9952. *Eucirroedia pampina* (Gn.) (Scalloped Sallow) – 22-VIII-2001 1, 9A-IX-2002 1 and 16C-VIII-2006 1.
9957. *Sunira bicolorago* (Gn.) (Bicolored Sallow) – 25-IX-2001 1.
9960. *Sunira verberata* (Sm.) (Western Sallow) – 24-IX-2001 2.
9962. *Anathix puta* (G. & R.) (Dusky or Puta Sallow) – 22-VIII-2001 4, 30-VIII-2001 1, 9A-IX-2002 3, 30B-VIII-2003 1, 10B-VIII-2008 1 and 10C-VIII-2008 1.
9963. *Anathix aggressa* (Sm.) (Pale Sallow) – 22-VIII-2001 1 and 9A-IX-2002 1.
9965. *Xanthia tatago* Laf. & Mik. (Pink-barred Sallow) – 17-IX-2001 1, 24-IX-2001 1 and 9A-IX-2002 2.
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.
9987. Mniotype *ducta* (Grt.) – 12A-VI-2003 1.
9988. Mniotype *prob tenera* (Sm.) (Miniota Rover) – 7-VI-2001 3, 12A-VI-2003 1 and 19A-VI-2005 1.
9990. *Sutyna profunda* (Sm.) (Profound Sallow) – 13C-VIII-2006 1 and 16B-VIII-2006 1.
9993. *Brachylomia populi* (Stkr.) (Cloaked Peasant) – 9A-IX-2002 1 and 16C-VIII-2006 1.
9999. *Brachylomia discinigra* (Wlk.) (Black-disc Peasant) – 22-VIII-2001 1.
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.

10065. *Homohadena infixa* (Wlk.) (Broad-lined Sallow) – 27A-VII-2003 1, 24B-VI-2006 1 and 13A-VII-2006 1.
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.
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.
10108. *Oncocnemis viriditincta* Sm. – 22-VIII-2001 1 and 30-VIII-2001 1.
10140. *Oncocnemis poliochroa* Grt. – 8A-VIII-2003 1.
10143. *Oncocnemis mackiei* (B. & Benj.) (Mackie's Beauty) – 22-VIII-2001 1.
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 and 24B-VI-2006 1.
10223. *Discestra trifolii* (Hufn.) – 4-VI-2004 1.
10224. *Discestra mutata* (Dod) – 12B-VI-2003 1.
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.
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.
10271. *Mamestrra configurata* Wlk. (Bertha Armyworm) – 22-VI-2001 4, 5-VII-2001 1 and 13A-VII-2006 1.
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.
10276. *Polia imbrifera* (Gn.) (Cloudy Arches) – 5-VII-2001 1, 24C-VI-2006 1, 13A-VII-2006 1 and 26B-VI-2007 1.
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.
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 and 24C-VI-2006 1.
10289. *Polia goodelli* (Grt.) (Goodell's Arches) – 24C-VI-2006 1 and 19b-VI-2008 1.
10290. *Polia obscura* (Sm.) (Obscure Arches) – 24A-V-2006 1 and 29-V-2008 3.
10292. *Melanchra adjuncta* (Gn.) (Hitched Arches) – 24B-VI-2006 2, 13B-VII-2006 1 and 10B-VIII-2008 1.
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.
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 and 24B-VI-2006 1.

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 and 29-V-2008 1.
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.
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.
10322. *Hadena circumvadis* Sm. – 22-VI-2001 1, 29A-VI-2003 1 and 29B-VI-2003 1.
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.
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.
10394. *Lacinipolia vicina* (Grt.) (Small Gray Arches) – 15-VII-2001 1, 4-VIII-2001 1 and 25-VII-2004 1.
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.
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 and 19A-VI-2008 1.
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.
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.
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.
10446. *Leucania multilinea* Wlk. (Many-lined Wainscot) – 25B-VII-2007 1 and 10B-VIII-2008 1.
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.
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 and 19C-VI-2008 1.
10471. *Stretchia plusiaeformis* Hy. Edw. (Gray Spectacles) – 25-IV-2001 4, 28-IV-2001 1, 10-V-2002 2 and 19-V-2002 1.
10490. *Orthosia revicta* (Morr.) – 25-IV-2001 6, 28-IV-2001 6, 15-V-2001 3, 10-V-2002 3, 29-V-2002 1 and 20A-V-2005 1.

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.
10493. *Orthosia segregata* f. *negussa* (Sm.) – 15-IV-2001 2, 25-IV-2001 14, 28-IV-2001 8 and 29-V-2002 1.
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 and 24A-V-2006 1.
10513. *Egira dolosa* (Grt.) (Grieving Woodling or Greater Black-letter Dart) – 25-IV-2001 1, 19-V-2002 1 and 29-V-2002 1.
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.
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 and 19C-VI-2008 1.
10645. *Agrotis orthogonia* Morr. (Pale Western Cutworm) – 10A-VIII-2008 1.
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.
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 and 19C-VI-2008 1.
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.
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.
- 10701.1. *Euxoa adumbrata* (Ev.) – 22-VI-2001 1.
- 10701.2. *Euxoa auxiliaris* (Grt.) (Auxiliary Dart) – 4-VIII-2001 1, 29A-VI-2003 1 and 3A-VIII-2006 1.
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.
10705. *Euxoa messoria* (Harr.) (Reaper Dart or Dark-sided Cutworm) – 17-VIII-2002 1 and 25-VII-2004 1.
10715. *Euxoa scandens* (Riley) – 22-VI-2001 1.
10723. *Euxoa tristicula* (Morr.) (Three-marked Dart) – 7-VI-2001 2, 22-VI-2001 9, 15-VII-2001 3 and 23-VI-2002 1.
10728. *Euxoa pestula* Sm. (Pestula Dart) – 22-VI-2001 1.
10738. *Euxoa mimallonis* (Grt.) (Ruddy Dart) – 17-VIII-2002 1 and 9A-IX-2002 1.

10749. *Euxoa intrita* (Morr.) (Tippling Dart) – 17-VIII-2002 16, 8A-VIII-2003 1 and 3B-VIII-2006 1.
10755. *Euxoa declarata* (Wlk.) (Clear Dart) – 30-VIII-2001 1, 9A-IX-2002 1 and 30-VIII-2004 1.
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.
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.
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.
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.
10807. *Euxoa albipennis* (Grt.) (White-winged Dart) – 22-VIII-2001 2, 9A-IX-2002 2 and 9B-IX-2002 1.
10817. *Euxoa obeliscoides* (Gn.) (Obelisk Dart) – 30A-VIII-2003 1.
- 10826.1. *Euxoa castanea* Laf. – 15-VII-2001 1.
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.
10852. *Euxoa auripennis* Lafontaine or 10854 E. 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.
10854. *Euxoa servita* (Sm.) (Servita Dart) – 25B-VII-2007 1 and 10A-VIII-2008 2.
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.
- 10861.1. *Euxoa maimes* (Sm.) – 22-VIII-2001 1.
10891. *Ochropleura implecta* (L.) (O. plecta) (Flame-shouldered Dart – 22-VI-2001 1, 17-VIII-2002 1, 24C-VI-2006 1 and 26B-VI-2007 1.
10910. *Anicla* (Euagrotis) *tepperi* (Sm.) (Black-girdled Dart) – 22-VI-2001 2, 9B-IX-2002 1, 4-VI-2004 1 and 26D-VI-2007 2.
10915. *Peridroma saucia* (Hbn.) (Variegated Cutworm Moth) – 30-VIII-2001 1.
10917. *Diarsia rubifera* (Grt.) (Rubifera Dart) – 4-VIII-2001 1 and 10B-VIII-2008 3.
10921. *Diarsia rosaria* (Grt.) (Rosy Dart) – 22-VI-2001 1.
10923. *Actebia balanitis* (Grt.) (Acorn Dart) – 22-VI-2001 1.
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.
- 10927.1. *Spaelotis bicava* Lafontaine – 22-VI-2001 1.
10928. *Graphiphora augur* (Grt.) (Soothsayer Dart) – 22-VIII-2001 1, 13A-VII-2006 2 and 13B-VII-2006 2.
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.
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.

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.
10943. *Xestia normaniana* (Grt.) (Norman's Dart) – 3A-VIII-2006 1 and 3C-VIII-2006 1.
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.
10951. *Pseudohermonassa tenuicula* (Morr.) (Hair-pin 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.
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.
10988. *Coenophila opacifrons* (Grt.) – 17-VIII-2002 1. This species is typically associated with bogs, habitat which does not exist in this area.
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 and 19C-VI-2008 1.
10996. *Cerastis salicarum* (Wlk.) (Willow Dart) – 25-IV-2001 3, 28-IV-2001 1, 10-V-2002 1 and 19-V-2002 1.
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.
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.
11041. *Abagrotis placida* (Grt.) group – 4-VIII-2004 1 and 3A-VIII-2006 1.
- 11041.1. *Abagrotis hermina* Laf. – 30-VIII-2001 1, 17-VIII-2002 1 and 27A-VII-2003 1.
11077. *Heliothis ononis* (F.) – 29A-VI-2003 1.
11164. *Schinia florida* (Gn.) – 10B-VII-2003 1.
11192. *Schinia cumatilis* (Grt.) (Silver-banded Gem) – 15-VII-2001 1, 27B-VII-2003 2 and 25-VII-2004 1.

## ***DISCUSSION***

An analysis of the data from the present study of the moths encountered in twelve major study areas in south-central Alberta, reveals that the present area (BL) is most similar (62.26%) to the aspen parkland of the former Allan Hall Acreage south of Nevis (AH) and least similar (34.62%) to the J.J. Collett Natural Area (JC). More habitats in BL are similar to those of AH, and thus many similar food plants are present. The J.J. Collett Natural area, on the other hand has many more habitats, especially spruce woods, than are present in BL.

A meaningful comparison can be made between this area and that of a parallel study made on the smaller Hall acreage, 3 km south of Nevis, as both are excellent examples of Aspen Parkland. The number of study days in each area was quite similar: 42 for 3 km S Nevis, and 40 for the Buffalo Lake Conservation Area. Percentage-wise, 61.40% of the recorded moths were common to both. The higher number of species found only in the Buffalo Lake area, indicates that it has a somewhat greater range of habitats.

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.

A comparison can also be made between the moths of the Buffalo Lake Conservation Area and those of Dry Island Buffalo Jump Provincial Park. Percentage-wise, only 50.07% of the recorded moths were common to both. This can be explained on the basis of the ecological dissimilarities of the two areas: the Buffalo Lake area being typical native Aspen Parkland; while the Dry Island area is comprised of many diverse communities, including riverine forest, badland terrain on south facing slopes, native grassland, shrubland and mixed woods on north-facing slopes. The higher number of plant species and the greater range of soil and microclimate habitats in the Dry Island area meet the ecological requirements of a greater number of moth species.

## **SUMMARY**

A steadily increasing number of species of Lepidoptera have become known for the area as research progressed: 304 in 2001 (Bird 2002), 374 in 2002 (Bird 2003), 400 in 2003 (Bird 2004), 434 in 2004 (Bird 2005), 464 in 2005 (Bird 2006), 526 in 2006 (Bird 2007), 531 in 2007 (Bird 2008), while the present report lists 543 species. While this may seem an impressive number, it is felt that, with further study, this total could be brought up to over 600. To put things into perspective, it is known that there are over 1000 macromoths and 1000 micromoths in the province. More species can still be added, a few of the present reports may be found to be based on misidentifications, and there are many species in the “unknown” category, especially in the Gelechiidae and other micromoth groups, which will eventually be determined or described.

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 scurrallis*, 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 12 major areas involved in the present study, thirteen species of moths were found only at BL - *Acanthopteroctetes bimaculata*, *Scythris mixaula*, *Syncopacma* sp. ?, *Eucosma similiana*, *Pyla aequivoca*, *Hyles lineata*, *Trichoplusia ni*, *Autographa*

flagellum, *Anathix aggressa*, *Oncocnemis saundersiana*, *Oncocnemis viriditincta*, *Coenophila opaciformis* and *Heliothis ononis*.

Moths were found on all visits but peak numbers occurred during the summer months. As most species were encountered over a 1-2 week period, attempts were made to sample frequently. Weather and other conditions sometimes prevented sampling.

### **ACKNOWLEDGEMENTS**

Grant Nieman and Andy Murphy, of the Alberta Conservation Association, are thanked for issuing Letters of Authority to allow the collecting of Lepidoptera in the Buffalo Lake Conservation Area in order to arrive at the putting together of a baseline list of the species of the area, and also for supplying a key to allow vehicle access when transporting traps into and out of the Area. Thanks are also extended to Bob Thompson of Ducks Unlimited for assisting with access and also for providing encouragement. Sincere thanks are extended to Gary Anweiler for his help in naming or verifying the macromoths, and Greg Pohl for his assistance in the identification of micromoths. Chris Schmidt verified the Arctiids and some of the Geometrids. Also to be thanked are Dr. J.-F. Landry for help with *Coleophora* and *Scythris*, Doug Macaulay for identifying Pterophorids and Dr. George Balogh for identifying specimens of the genus *Eupithecia*. Jason Dombroskie provided help with some of the Tortricidae. Even though, others helped, I personally take responsibility for the identification of the species mentioned in this report.

The Alberta Conservation Association deserves special thanks for providing a \$1000 grant in 2006 which allowed the purchase of an additional UV moth trap, 3 batteries, ethyl acetate and insect pins. Felix Sperling and Danny Shpeley facilitated the study of specimens in the Bowman Collection of the Strickland Museum, and Greg Pohl did the same for the Northern Forest Research Centre Entomology Collection. Ernest Mengersen is thanked for identifying several species and for allowing access to the Entomology Collection at Olds College.

### **LITERATURE CITED**

- Bird, C.D. 2002. Moths of the Buffalo Lake Conservation Area, a first report. Report prepared for Alberta Parks and Protected Areas. 13 pp.
- Bird, C.D. 2003. Moths of the Buffalo Lake Conservation Area, a second report. Report prepared for Alberta Parks and Protected Areas. 18 pp.
- Bird, C.D. 2004. Moths of the Buffalo Lake Conservation Area, a third report. Report prepared for Alberta Parks and Protected Areas. 21 pp.
- Bird, C.D. 2005. Moths of the Buffalo Lake Conservation Area, 2001-2004. Report prepared for Alberta Parks and Protected Areas. 25 pp.
- Bird, C.D. 2006. Moths of the Buffalo Lake Conservation Area, 2001-2005. Report prepared for Alberta Parks and Protected Areas. 27 pp.

- Bird, C.D. 2007. Moths of the Buffalo Lake Conservation Area, 2001-2006. Report prepared for Alberta Parks and Protected Areas. 32 pp.
- Bird, C.D. 2008. Moths of the Buffalo Lake Conservation Area, 2001-2006. Report prepared for Alberta Parks and Protected Areas. 37 pp.
- Bowman, Kenneth 1951. An annotated list of the Lepidoptera of Alberta. *Can. J. Zoology* 29: 121-165.
- Hodges, R. W. (ed.). 1983. Check List of the Lepidoptera of America North of Mexico. E.W. Classey Ltd. & The Wedge Entomological Research Foundation.
- Ives, W.G.H. & H.R. Wong. 1988. Tree and Shrub Insects of the Prairie Provinces. Can. Forestry Serv., Northern For. Centre, Inf. Rept. NOR-X-292.
- Landry, B. & J.-F. Landry. 2004. The genus *Alucita* in North America, with description of two new species (Lepidoptera: Alucitidae). *The Canadian Entomologist* 136: 553-579.
- Mancroft-EBA Consultants Ltd. 1998. Valuation, grazing inventory & assessment of risk on Sections 5 & 6 Twp. 41 Rge. 19 W4M. Mancroft-EBA Consultants Ltd., 0505-98-50341000. 6 pp + 2 maps.
- Pohl, G. R., C. D. Bird, J.-F. Landry and G. G. Anweiler. 2005. New records of Microlepidoptera in Alberta, Canada. *J. Lepidopterist's Soc.* 59(2): 61-82.
- Pohl, G. & C. Bird. Winter 2005. Acanthopteroctetidae in Alberta – a very big name for some very small moths. *Alberta Lepidopterist's Guild News* 1(2): 5.
- Prentice, R.M. 1955. The life history and some aspects of the ecology of the large aspen tortrix, *Choristoneura conflictana* (Wlk.) (n. comb.) (Lepidoptera: Tortricidae). *Can Ent.* 87: 461-473.
- Rangeland Conservation Service Ltd. 2006. Buffalo Lake Moraine Conservation Area (Caine and Murdoch Properties) Vegetation and Range Resource Inventory. Prepared for Nature Conservancy Canada, Calgary, Alberta. 164 pp.
- Razowski, Józef. 1997. *Cochylini* (Lepidoptera: Tortricidae) of Canada. *Acta zool. Cracov.*, 40(1): 107-163.
- Rings, R.W., E.H. Metzler, F.J. Arnold & D.H. Harris. 1992. The Owlet Moths of Ohio. *Bull. Ohio Biol. Surv.* 9(2).
- Rockburne, E.W. & J.D. Lafontaine. 1976. The Cutworm Moths of Ontario and Quebec. Canada Dept. Agriculture, Publ. 1593. 164 pp.
- Schintlmeister, A. 1983 [1984]. Zum status einiger fernöstlicher taxa. Notodontiden-Studien I. *Zeitschrift der Arbeitsgemeinschaft Österreichischer Entomologen* 35: 106-111.

### ***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.

### ***USEFUL BOOKS ON MOTHS***

- Covell, Charles V., Jr. 1984. A Field guide to Moths; Eastern North America.  
Houghton, Mifflin Co., Boston, New York.
- Handfield, Louis. 1999. Le Guide des Papillons du Quebec. Vol. 1. Broquet,  
Boucherville, QC.
- Ives, W.G.H. & H.R. Wong. 1988. Tree and Shrub Insects of the Prairie Provinces.  
Can. Forestry Serv., Northern For. Centre, Inf. Rept. NOR-X-292.

## Plate I. Some moths from the Buffalo Lake Conservation Area.



**Anerastia lotella**  
4-VIII-2001, Buffalo Lake, AB, C.D. Bird



**Argyresthia oreasella**  
15-VII-2001, Buffalo Lake, AB, C.D. Bird



**Bactra furfurana**  
17-IX-2001, Buffalo Lake, AB, C.D. Bird



**Crambus girardellus**, wingspan 28 mm: ALBERTA, Buffalo  
Lake Conservation Area, C.D. Bird, BIRD147, C.D. Bird image



**Gelechia lynceela**, wingspan 15 mm; ALBERTA, Buffalo Lake,  
22-VI-2001, C.D. Bird, BIRD5, C.D. Bird image



**Neodactria luteolellus**, wingspan 23 mm: ALBERTA, Buffalo Lake  
Conservation Area, 23-VI-2002, C.D. Bird, BIRD 501, C.D. Bird image



**Pediasia trisecta**, wingspan 32 mm: ALBERTA, Buffalo Lake Conservation  
Area, 9B-IX-2002, C.D. Bird, BIRD85, C.D. Bird image



**Thaumatopsis pexella coloradella**, wingspan 25 mm: ALBERTA, Buffalo  
Lake Conservation Area, 30-VIII-2001, C.D. Bird, BIRD716, C.D. Bird image

**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 1004 – 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.