

LEPIDOPTERA OF BIG KNIFE PROVINCIAL PARK, 2001-2009

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The present paper incorporates the information in previous reports along with that gathered in 2009. It also includes a number of redeterminations and additions to the information in the earlier reports.



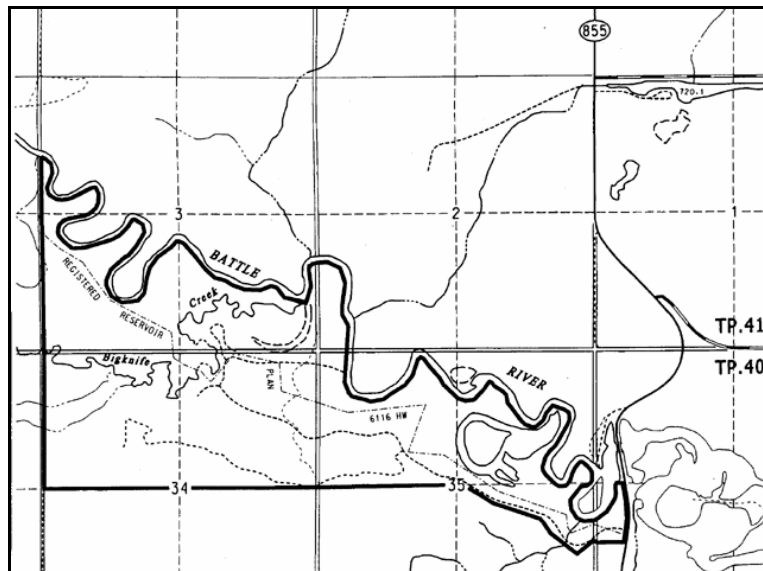
Buffalo Lake Naturalist's 15 September 2002 field trip in Big Knife Provincial Park, Jodi Vincent and Charles Bird kneeling; Ann Bird, Mary Muhlbach, Wayne Kinsella, Nora and Hugh Charles, Lorreen and John Beggs in the back.

THE AREA

Big Knife Provincial Park, formally established in 1962, is located in the valley of the Battle River, 40 km northeast of Stettler. Located in the Aspen Parkland, it has a wide variety of relatively undisturbed vegetation types ranging from open grasslands through shrublands (buckbrush, silver willow, rose) to deciduous (aspen and balsam poplar),

mixed wood and coniferous (white spruce) communities. It also has some badland topography.

The Park has an interesting assortment of species making up the fauna and flora as it contains coniferous foothills/boreal elements on north-facing slopes, prairie elements on the escarpment and at various places lower down, as well as riverine forest elements near the Battle River. The badland terrain and alkali flats with *Opuntia fragilis* are also of interest.



Map of Big Knife Provincial Park.

An ecological survey, with a listing of the local flora and fauna, was carried out by Ebel & Finkelman (1973). The next study was that of an 11 July 1993 reconnaissance by Bird who studied the plants (1993) and Lloyd Lohr (1993) who made notes on the birds and mammals. Checklists of the plants, birds and mammals were prepared by McIsaac & Macdonald in 1994. These were followed by a detailed Biophysical Inventory by Karpuk & Meijer (1999). Reports on the moths of the area have been prepared by Bird (2002, 2003, 2004, 2005, 2006) and by Jodi Vincent (2002). The results of these studies are included in the present report. Specimens collected by Jodi Vincent have the initials "JV". Also included are some moths collected 17 Aug 2002 by C. Bruce Christensen, these are indicated by "CBC".



A UV trap set up among awnless brome, silver willow, willow and aspen, May 28, 2004.

THE PRESENT RESEARCH

As no information was available on the insects of the Park, the present author, with the assistance of Wayne Nordstrom, obtained a Letter of Authority to allow the collecting of Lepidoptera in the Park in 2001. Due to time constraints, as the author was carrying out more intensive studies at five other locations, it was possible to visit the area only on 23 May 2001 of that year. Two ultraviolet (UV) traps were set out that night, one in deciduous woodland and the other in coniferous woodland. The catch was surprisingly good. In 2002, an additional 6 trap nights occurred: May 1, June 3 and 12, July 9, August 8, and September 11. A day hike with the Buffalo Lake Naturalists and Jodi Vincent also took place on September 15. The 2002 results are reported in Bird (2003) and Vincent (2003). In 2003, research was carried out in the area on six additional nights: May 14, June 17, July 8 and 30, August 22 and September 13. Some moths collected by Jodi Vincent in 2003 were reported in Bird (2004). Another day hike with the Buffalo Lake Naturalists and Abigail Knight took place of September 14, 2003. In 2004, work was carried out on the nights of May 28, June 22 and August 19. In 2005, moths were collected on the night of June 29. In 2006, the area was sampled four times: May 30, July 4, August 25 and September 9. In 2007, studies were made on May 11 and August 29. In 2008, studies were made at three sites on July 25. In 2009 studies were made at three sites on August 30. Details of the collection sites are given in the Appendix. The present report incorporates the results of studies made from 2001-2008 (Bird 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009; Vincent 2002). It also includes a number of corrections to identifications in the previous reports.

The writer has received no external funding for this project.

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.

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.

The author is a member of the Alberta Lepidopterist's Guild, the purpose of which is to encourage study of Alberta's moths and butterflies.

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 the Northern Forest Research Centre, and possibly to the Canadian National Collection.

CHECKLIST

The order and terminology, are that of R.W. Hodges (1983) except where recent changes in taxonomy have occurred. Except for material gathered by Jodi Vincent and Bruce Christensen, all collections were made by the author. While most of the larger or macromoths are relatively well known, the same cannot be said for many 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. 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; an "SR" indicates a sight record. Common names are added when known.

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.

Pohl et al (2010) have put together an up-to-date annotated list of the Lepidoptera of Alberta. They include 2367 species, many more than those mentioned by Bowman (1951). The list incorporates recent changes in taxonomy of all groups according to

various literature sources, including those listed for the Noctuoidea by Lafontaine & Schmidt (2010).

FAMILY UNKNOWN

Unknown microlep – 9-VII-2002 1.

HEPIALIDAE – Ghost Moths and Swifts

19. *Sthenopsis purpurascens* (Pack.) (Large Ghost Moth) - 24-VII-2002 1 JV, 25B-VII-2008 1 and 25C-VII-2008 1.
 29. *Gazoryctra novigannus* (B. & Benj.) (Ghost Moth) – 1-IX-2002 1 JV, 22A-VIII-2003 1, 9C-IX-2006 1, 29A-VIII-2007 1 and 29B-VIII-2007 1.

INCURVARIIDAE – Incurvariid Moths

185. *Lampronia* (*Tanysaccus*) *sublustris* Braun – 12-VI-2002 2. This may be a synonym of *Lampronia aenescens*.

TINEIDAE – Clothes Moths and others

334. *Amydria effrentella* Clem. – 9-VII-2002 1, 8-VIII-2002 1, 30B-VII-2003 1 and 30C-VII-2003 1.
 399. *Tinea irrepta* Braun – 17A-VI-2003 1, 8A-VII-2003 1, 30V-VII-2003 1, 22-VI-2004 1, 19-VIII-2004 4, 29A-VI-2005 1, 4A-VII-2006 1, 4C-VII-2006 1, 24C-VII-2008 1 and 30B-VIII-2009 1.
 412. *Niditinea orleansella* (Cham.) – 25B-VII-2008 1.
 421. *Monopis spilotella* Tengström – 19-VIII-2004 1 and 25B-VII-2008 1.

GRACILLARIIDAE – Gracilariid Moths

- 583-644. *Caloptilia* sp. – 23-V-2001 1 and 29A-VIII-2007 1.
 587. *Caloptilia alnivorella* (Cham.) – 30A-BIII-2009 1 and 30B-VIII-2009 1.
 Sp. nr. 595. *Caloptilia bimaculatella* (Ely) – 17A-VI-2003 1.
 609. *Caloptilia invariabilis* (Braun) – 23-V-2001 1, 1-V-2002 1, 19-VIII-2004 1 and 11B-V-2007 1. Originally determined as *Caloptilia betulivora* McD. The specimens are probably *C. invariabilis* (Pohl et al. 2010).
 669. *Parornix conspicuella* (Dietz) – 17A-VI-2003 1, 29A-VIII-2007 1 and 25A-VII-2008 1.
 692. *Acrocercops astericola* (F. & B.) – 29A-VI-2005 1.
 798. *Phyllonorycter prob apparella* (Braun) (Aspen Leaf Miner) – 23-V-2001 1 and 27-V-2004 1.

OECOPHORIDAE – Oecophorid Moths

876. *Agonopterix rosaciliella* (Bsk.) – 9B-IX-2006 1.
 889. *Agonopterix argillacea* (Wlsm.) – 23-V-2001 1, 1-V-2002 4 and 30C-VII-2003 1.
 908. *Depressariodes ciniflonella* Lienig & Zell. – 22A-VIII-2003 1.
 912. *Semioscopis packardella* (Clem.) – 23-V-2001 2.
 913. *Semioscopis merricella* Dyar – 1-V-2002 1, 14A-V-2003 2 and 17-V-2003 1 JV.
 Reported as new for Alberta in Pohl et al. (2005).
 914. *Semioscopis inornata* Wlsm. – 1-V-2002 1.
 915. *Semioscopis megamicrella* Dyar – 1-V-2002 2 and 14A-V-2003 1.
 916. *Semioscopis aurorella* Dyar – 1-V-2002 2.
 922. *Depressaria pastinacella* (Dup.) (Parsnip Webworm Moth) – 14A-V-2003 1.
 942. *Nites grotella* (Rob.) – 25B-VII-2008 1. Rare in Alberta.

ELACHISTIDAE – Elachistid Moths

Species unknown – 9-VII-2002 1, 17-VI-2003 2, 8-VII-2003 1 and 4C-VII-2006 2.

SYMMOCIDAE – Symmocid Moths

- 1138.31. *Glyphidocera hurlberti* Adamski – 8B-VII-2003 1. This species was described by Adamski in 2000.

BLASTOBASIDAE – Blastobasid Moths

- Species unknown – 11-IX-2002 1.
 1156. *Hypatopa titanella* McD. – 4B-VII-2006 1.
 1221. *Holcocera immaculella* McD. – 9-VII-2002 1.

COLEOPHORIDAE – Coleophorid Moths

- 1254-1389. *Coleophora* spp. – 8-VIII-2002 1, 30B-VII-2003 2, 19-VIII-2004 1, 29A-VI-2005 1, 4B-VII-2006 1, 25B-VII-2008 1 and 25C-VII-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 species that remain to be described.
 1283. *Coleophora cretaticostella* Clem. – 27-V-2004 1.
 1316. *Coleophora rosacella* Clem. – 9-VII-2002 1, 8A-VII-2003 1 and 29A-VI-2005 4.
 1323. *Coleophora sparsipuncta* Heinr. – 8-VIII-2002 1 and 30-VII-2003 1.
 1350 *Coleophora quadruplex* McD. – 4B-VII-2006 1.
 1352. *Coleophora sparsipulvella* Cham. – 30-VII-2003 3 and 4B-VII-2006 1.
 1388. *Coleophora trifolii* (Curt.) (Large Clover Case-bearer) – 9-VII-2002 1, 18-VII-2002 1 JV, 8A-VII-2003 1, 8B-VII-2003 1, 29A-VI-2005 1, 4A-VII-2006 1, 4B-VII-2006 1, 25B-VII-2008 1 and 25C-VII-2008 1.
Coleophora JFL002 – 9-VII-2002 1.

Coleophora JFL035 – 8-VII-2002 1 and 4C-VII-2006 1.
 Coleophora JFL084 – 22-VIII-2003 1 and 19-VIII-2004 7.
 Coleophora JFL092 – 26-VIII-2002 1.
 Coleophora JFL108 – 17-VI-2003 1.

MOMPHIDAE – Momphid Moths

1457. Mompha tricristatella (Cham.) – 9-VII-2002 1.

COSMOPTERYGIDAE – Cosmopterygid Moths

Species unknown – 17-VI-2003 1.

GELECHIIDAE – Gelechiid Moths

Species unknown – 23-V-2001 4, 3-VI-2002 2, 9-VII-2002 2, 8-VIII-2002 1, 14A-V-2003 2, 14B-V-2003 1, 17A-VI-2003 6, 17B-VI-2003 1, 8A-VII-2003 2, 8B-VII-2003 1, 27A-VII-2003 1, 30A-VII-2003 2, 30B-VII-2003 2, 30C-VII-2003 1, 22A-VIII-2003 1, 22B-VIII-2003 2, 13B-IX-2003 2, 27-V-2004 6, 22-VI-2004 3, 19-VIII-2004 6, 29A-VI-2005 1, 4A-VII-2006 1, 29A-VIII-2007 1 and 25B-VII-2008 3. 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.

1796. Coleotechnites blastovora McLeod – 23-V-2001 2, 14A-V-2003 2, 22-VI-2004 1 and 11A-V-2007 1.

1826. Coleotechnites piceaella (Kft.) – 25B-VII-2008 1.

1880. Xenolechia velatella (Bsk.) – 3-VI-2002 1, 14A-V-2003 6 and 4A-VII-2006 1.

1902. Lita variabilis (Bsk.) – 27A-VIII-2003 1 and 30B-VIII-2009 1.

1946. Gelechia lynceola Zell. – 8B-VII-2003 1 and 22-VI-2004 1.

1985. Gnorimoschema gallaeasterella (Kellicott) – 22A-VIII-2003 1, 19-VIII-2004 2 and 29B-VIII-2007 1.

1986. Gnorimoschema gallaesolidaginis (Riley) – 9C-IX-2006 1 and 30B-VIII-2009 1.

2000. Gnorimoschema septentrionella Fyles – 30C-VII-2003 1 and 19-VIII-2004 7.

2040. Caryocolum cassella (Wlk.) – 8-VIII-2002 1. Reported as new for Alberta in Pohl et al (2005).

2069. Gnorimoschema vastificum Braun – 22B-VIII-2003 1.

2071.1. Chionodes landryi Hodges – 8A-VII-2003 1.

2093. Chionodes mediofuscella (Clem.) – 23-V-2001 1, 1-VI-2002 1, 3-VI-2002 1, 12-VI-2002 1, 17A-VI-2003 1, 17B-VI-2003 1, 17C-VI-2003 1, 27-V-2004 2, 22-VI-2004 1, 19-VIII-2004 1 and 30A-V-2006 2.

2099. Chionodes obscuruscella (Cham.) – 19-VIII-2004 1, 29A-VIII-2007 1, 30A-VIII-2009 1 and 30B-VIII-2009 1.

2111. Chionodes psilopterus (B. & Bsk.) – 8A-VII-2003 1, 27-V-2004 3, 29A-VI-2005 1, 4B-VII-2006 1, 4C-VII-2006 2, 25A-VII-2008 1 and 25C-VII-2008 1.

2117. Chionodes terminimaculella (Kft.) – 23-V-2001 1, 3-VI-2002 3, 27-V-2004 1 and 30C-V-2006 1.

2127. *Filatima abactella* (Clarke) – 12-V-2002 3, 3-VI-2002 2, 17A-VI-2003 1, 17C-VI-2003 1, 8B-VII-2003 1, 28A-V-2004 14 SR, 28B-V-2004 9 SR, 30B-V-2006 1 and 30C-V-2006 1.
2225. *Battaristis concinusura* (Cham.) – 25B-VII-2008 1.
2267. *Helcystogramma fernaldella* (Bsk.) – 23-V-2001 6, 3-VI-2002 1, 12-VI-2002 1, 17A-VI-2003 1, 27-V-2004 5 and 30C-V-2006 1.
2302. *Dichomeris setosella* (Clem.) – 23-V-2001 1.
2303. *Dichomeris simplicella* Bsk. - 29A-VIII-2007 1, 25B-VII-2008 1 and 25C-VII-2008 1.

ALUCITIDAE – Many Plume Moths

- Alucita* indet. -30A-VIII-2009 1 and 30B-VIII-2009 1.
- 2313.1. *Alucita montana* Barnes & Lindsay – 19-VIII-2004 2 and 29A-VIII-2007 1. 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.
- 2313.2. *Alucita adriendenisi* B. Landry & J.F. Landry – 1-V-2002 1, 30A-VII-2003 3, 19-VIII-2004 1, 25A-VII-2008 1 and 25C-VII-2008 1. This species was recently described (B. Landry & J.F. Landry 2004).

EPERMINIIDAE – Eperminiid Moths

2334. *Ochromolopis ramapoella* (Kft.) – 23-V-2001 1 and 17B-VI-2003 1. Pohl et al. (2005) report this as new to Alberta

PLUTELLIDAE – Plutellid Moths

2363. *Plutella porectella* (L.) – 23-V-2001 1.
2366. *Plutella xylostella* (L.) (Diamondback Moth) – 23-V-2001 1, 30A-VII-2003 1, 30C-VII-2003 1, 22C-VIII-2003 1, 13A-IX-2003 1, 13B-IX-2003 1, 19-VIII-2004 1 and 9B-IX-2006 1.
2371. *Ypsolopha canariella* (Wlsm.) – 30B-VII-2003 1, 22C-VIII-2003 1, 19-VIII-2004 2, 9C-IX-2006 1, 25A-VII-2008 1, 25C-VII-2008 1 and 30A-VIII-2009 1.
2376. *Ypsolopha dentiferella* (Wlsm.) – 8-VIII-2002 1, 30B-VII-2003 1, 29A-VIII-2007 1 and 25C-VII-2008 1.
2380. *Ypsolopha falciferella* (Wlsm.) – 1-V-2002 3 and 14A-V-2003 1.

ARGYRESTHIIDAE – Argyresthiid Moths

- Argyresthia* sp. – 30A-VIII-2009 1.
2467. *Argyresthia oreasella* (Clem.) – 25B-VII-2008 2.
2474. *Argyresthia pygmaeella* (Hbn.) – 19-VIII-2004 1.

COSSIDAE – Carpenterworm Moths

2676. *Acosus populi* (Wlk.) (Aspen Carpenterworm) – 29-VI-2002 1 JV.

TORTRICIDAE – Tortricid Moths

- Olethreutine species indet - 23-V-2001 1, 9A-IX-2006 1 and 25A-VII-2008 2.
- 2743a. *Endothenia nubilana* (Clem.) – 4C-VII-2006 1, 25C-VII-2008 1 and 30B-VIII-2009 1.
2753. *Apotomis capreana* (Hbn.) (Sallow Apotomis Moth) – 4A-VII-2006 1 and 25C-VII-2008 1.
2765. *Apotomis deceptana* (Kft.) - 29A-VIII-2007 1.
2766. *Apotomis dextrana* McD. (Green Aspen Leafroller Moth) – 8-VIII-2002 1, 22C-VIII-2003 1, 25C-VII-2008 2, 25C-VII-2008 1, 30A-VIII-2009 1, 30B-VIII-2009 1 and 30C-VIII-2009 1.
2769. *Pseudosciaphila duplex* (Wlsm.) (Spotted Leaf Roller) – 22-VI-2004 1.
2770. *Orthotaenia undulana* (D. & S.) (Dusky Leafroller Moth) – 9-VII-2002 1, 17A-VI-2003 1, 17C-VI-2003 1, 8A-VII-2003 1, 8B-VII-2003 1, 22-VI-2004 1, 29A-VI-2005 1, 29B-VI-2005 1 and 4C-VII-2006 1.
- Olethreutes* spp. – 9-VII-2002 2, 8-VIII-2002 4, 26-VIII-2002 1, 8A-VII-2003 1, 8B-VII-2003 2, 30A-VII-2003 1, 30C-VII-2003 1, 22-VI-2004 1, 29A-VI-2005 2, 29B-VI-2005 1 and 4A-VII-2006 1. Many of the species in this genus are poorly known, difficult to identify and/or require genitalic examination.
- 2788 or 2794. *Olethreutes inornatana* (Clem.) or *quadrifidus* (Zell.) – 4B-VII-2006 1.
2821. *Olethreutes appendicea* (Zell.) (Serviceberry *Olethreutes* Moth) – 4A-VII-2006 1 and 4B-VII-2006 1.
2839. *Olethreutes puncticostana* (Wlk.) – 22-VI-2004 1.
2860. *Hedya separatana* (Kft.) – 23-V-2001 1?, 17A-VI-2003 1 and 17C-VI-2003 1.
2861. *Hedya ochroleucana* (Frölich) – 9-VII-2002 2, 1-VII-2003 1 JV, 8A-VII-2003 2, 29A-VI-2005 2 and 25B-VII-2008 2.
2862. *Hedya nubiferana* (Haw.) – 8-VIII-2002 2.
2900. *Petrova burkeana* (Kft.) – 15-VIII-2002 1 JV and 25B-VII-2008 1.
2911. *Phaneta awemeana* (Kft.) – 23-V-2003 1 JV.
2926. *Phaneta verna* Miller – 14A-V-2003 1.
2929. *Phaneta ochroterminana* (Kft.) – 4C-VII-2006 2 and 25A-VII-2008 2.
2933. *Phaneta marmontana* (Kft.) – 30A-VII-2003 1, 4B-VII-2006 1, 4C-VII-2006 1 and 25C-VII-2008 2.
2940. *Phaneta convergana* (McD.) – 23-V-2001 1, 23-V-2003 1 JV and 11A-V-2007 1.
2951. *Phaneta ornatula* (Heinr.) – 25C-VII-2008 1. This is the first known collection for Alberta. A significant range extension as it is an eastern species.
2956. *Phaneta tarandana* (Mösch.) – 22C-VIII-2003 1.
2965. *Phaneta fertoriana* (Heinr.) – 22-VI-2004 1.
2969. *Phaneta indagatricana* (Heinr.) – 30B-VII-2003 1, 22A-VIII-2003 1, 4A-VII-2006 2 and 4C-VII-2006 1.
2972. *Phaneta dorsiatomana* (Kft.) – 23-V-2001 1.
2980. *Phaneta pallidicostana* (Wlsm.) – 9-VII-2002 2, 26-VIII-2002 1, 8A-VII-2003 2, 30B-VII-2003 1, 4A-VII-2006 1, 4B-VII-2006 1, 4C-VII-2006 3 and 30C-VIII-2009 1.
2985. *Phaneta infimbriana* (Dyar) – 25C-II-2008 1.

3005. *Phaneta effectalis* (Hulst) – 9-VII-2002 1.
Eucosma n. sp. 1 – 17C-VI-2003 1. In the last report as 3156 *Pelochrista occipitana*, this specimen is felt to be an undescribed species by Dr. Don Wright.
- Eucosma* n. sp. 2 – 29A-VI-2005 1. Retained by Dr. Donald Wright for future reference and as a basis for a male genitalia drawing. He considers it a new species of *Eucosma*.
3014. *Eucosma ridingsana* (Rob.) (Riding's *Eucosma* Moth) – 17-VIII-2002 1 JV and 22B-VIII-2003 1.
3031. *Eucosma serpentana* (Wlsm.) – 29B-VI-2005 1.
3035. *Eucosma morrisoni* (Wlsm.) – 29A-VI-2005 1.
3037. *Eucosma agricolana* (Wlsm.) – 8B-VII-2003 1 and 25A-VII-2008 1.
3116. *Eucosma dorsisignatana* (Clem.) – 26-VIII-2002 2, 11-IX-2002 6, 19-VIII-2004 1 and 25A-VII-2008 1.
- 3116a. *Eucosma similiana* (Clem.) – 30C-VIII-2009 2.
3119. *Eucosma junciciliana* (Wlsm.) – 8-VIII-2002 2, 26-VIII-2002 1 and 19-VIII-2004 1.
3142. *Eucosma cataclystana* (Wlk.) (Solidago *Eucosma* Moth) – 9-VII-2002 1.
3149. *Pelochrista argenteana* (Wlsm.) – 17C-VI-2003 1.
3209. *Notocelia purpurissitana* Heinr. – 9A-IX-2006 1.
3211. *Notocelia culminana* (Wlsm.) – 8-VIII-2002 1, 26-VIII-2002 1, 11-IX-2002 2, 30B-VII-2003 2, 30C-VII-2003 2, 19-VIII-2004 2, 25B-VII-2008 1 and 30B-VIII-2009 1.
3223. *Gypsonoma fasciolana* (Clem.) – 12-VI-2002 1.
3227. *Gypsonoma substitutionis* Heinr. – 9-VII-2002 1, 25B-VII-2008 1 and 25C-VII-2008 1.
3230. *Proteoteras aesculana* Riley (Early *Proteoteras* Moth) – 25B-VII-2008 1.
3248. *Pseudexentera oregonana* (Wlsm.) (Early Aspen Leafroller Moth) – 1-V-2002 2.
3283. *Epinotia solandriana* (L.) (Codling Moth) – 19-VIII-2004 1 and 29A-VIII-2007 1.
3288. *Epinotia castaneana* (Wlsm.) – 4B-VII-2006 1.
3306. *Epinotia nisella* Cl. (Variable *Tortrix* Moth) – 26-VIII-2002 1, 30A-VII-2003 3, 30C-VII-2003 1, 22A-VIII-2003 3, 22B-VIII-2003 1, 22C-VIII-2003 1, 19-VIII-2004 1 and 29A-VIII-2007 1.
3307. *Epinotia criddleana* Kft. – 8-VIII-2002 1, 29A-VIII-2007 1, 25B-VII-2008 1 and 30B-VIII-2009 1.
3310. *Epinotia transmissana* (Wlk.) (Walker's *Epinotia* Moth) – 8A-VII-2003 1?
3342. *Epinotia lomonana* (Kft.) – 11-IX-2002 3, 13B-IX-2003 1, 9A-IX-2006 4, 9B-IX-2006 1 and 9C-IX-2006 2.
3351. *Epinotia lindana* (Fern.) (Diamondback *Epinotia* Moth) – 9A-IX-2006 1. 9B-IX-2006 2, 29A-VIII-2007 2, 29B-VIII-2007 1 and 30A-VIII-2009 1.
3355. *Ancylis subaequana* (Zell.) – 30A-V-2006 1.
3358. *Ancylis discigerana* (Wlk.) - 17C-VI-2003 2.
3382. *Ancylis unguicella* (L.) – 23-V-2001 1 and 9-VII-2002 2 1.
3384. *Ancylis mediofasciana* (Clem.) – 23-V-2001 2, 3-VI-2002 2, 17A-VI-2003 2, 27-V-2004 4, 30A-V-2006 1 and 30C-V-2006 1.
3391. *Hystriophora stygiana* (Dyar) – 8B-VII-2003 2.
3466. *Cydia youngana* (Kft.) – 17C-VI-2003 1.

3502. *Croesia albicomana* (Clem.) – 9-VII-2002 2, 4A-VII-2006 1, 4B-VII-2006 1, 4C-VII-2006 1 and 25b-vII-2008 1.
3504. *Croesia curvalana* (Kft.) – 8-VIII-2002 1.
- Acleris* sp. – 26-VIII-2002 1 and 9B-IX-2006 1. Many members of this genus are still poorly known and identifications should be regarded as tentative until such time as a good, monographic treatment has been carried out.
3514. *Acleris cervinana* (Fern.) – 23-V-2001 1 and 3-VI-2002 1.
3520. *Acleris obligatoria* (Park & Raz.) – 27-V-2004 2, 19-VIII-2004 1, 30A-VIII-2009 1 and 30B-VIII-2009 1.
3525. *Acleris forbesana* (McD.) – 23-V-2001 3, 30C-V-2006 1 and 9B-IX-2006 1.
3536. *Acleris robinsoniana* (Fbs.) – 14B-VIII-2002 1 and 22C-VIII-2003 2.
3548. *Acleris variana* (Fern.) (Black-headed Budworm Moth) – 22A-VIII-2003 1 9B-IX-2006 3, 29A-VIII-2007 1, 25B-VII-2008 1 and 30B-VIII-2009 1.
3549. *Acleris maccana* (Tr.) – 1-V-2002 1.
3552. *Acleris scabrana* (D. & S.) – 1-V-2002 1?
3556. *Acleris nigrolinea* (Rob.) – 1-VI-2002 1 and 26-VIII-2002 1.
3561. *Acleris hudsoniana* (Wlk.) – 1-V-2002 5 and 14A-V-2003 1.
3565. *Eulia ministrana* (L.) (Ferruginous Eulia Moth) – 30A-V-2006 2.
3589. *Anopina wellingtoniana* Kft. – 9C-IX-2006 1, 11A-V-2007 1 and 25C-VII-2008 1.
3595. *Pandemis canadana* Kft. (Green Aspen Leaf-tier Moth) – 9-VII-2002 1, 17-VIII-2002 1 JV, 19-VIII-2004 1, 4A-VII-2006 1, 4B-VII-2006 2, 25A-VII-2008 1, 25B-VII-2008 1, 25C-VII-2008 1, 30A-VIII-2009 2 and 30B-VIII-2009 1.
3621. *Argyrotaenia quadrifasciana* (Fern.) (Lesser All-green Leafroller Moth) – 26-VIII-2002 1 and 4C-VII-2006 1.
3625. *Argyrotaenia mariana* (Fern.) – 3-VI-2002 1.
3635. *Choristoneura rosaceana* (Harr.) (Oblique-banded Leafroller Moth) – 11-IX-2002 1, 4C-VII-2006 1, 25B-VII-2008 2 and 25C-VII-2008 1.
3637. *Choristoneura conflictana* (Wlk.) (Large Aspen Tortrix) – 9-VII-2002 1, 17A-VI-2003 1, 17C-VI-2003 2, 4C-VII-2006 1 and 4B-VII-2006 1.
3638. *Choristoneura fumiferana* (Clem.) (Spruce Budworm Moth) – 8B-VII-2003 1, 4B-VII-2006 1 and 4C-VII-2006 1.
3648. *Archips argyrospila* (Wlk.) (Fruit-tree Leafroller Moth) – 4A-VII-2006 2, 4B-VII-2006 4, 4C-VII-2006 1, 25B-VII-2008 1 and 25C-VII-2008 1.
3675. *Aphelia alleniana* (Fern.) – 9-VII-2002 1 and 8B-VII-2003 1.
3682. *Clepsia persicana* (Fitch) (White-triangle Tortrix Moth) – 29A-VI-2005 1, 4A-VII-2006 1, 4B-VII-2006 1 and 25B-VII-2008 1.
3684. *Clepsia clemensiana* (Fern.) (Clemen's Clepsia Moth) – 26-VIII-2002 1, 11-IX-2002 1, 30B-VII-2003 1, 30C-VII-2003 1, 19-VIII-2004 3 and 29A-VI-2005 1, 4A-VII-2006 2, 4C-VII-2006 2 and 25A-VII-2008 1.
3688. *Ptycholoma peritana* (Clem.) (Garden Tortrix Moth) – 30C-VII-2003 1.
3689. *Ptycholoma virescana* (Clem.) – 8-VIII-2002 2, 26-VIII-2002 1 and 30A-VII-2003 1.
3706. *Sparganothis xanthoides* (Wlk.) (Mosaic Sparganothis Moth) – 26-VIII-2002 1, 30C-VII-2003 1, 4C-VII-2006 1 and 25A-VII-2008 1.
3710. *Sparganothis violaceana* (Rob.) - 30C-V-2006 1.

3711. *Sparganothis unifasciana* (Clem.) (One-lined Sparganothis Moth) – 9-VII-2002 1, 26-VIII-2002 1, 4A-VII-2006 1, 4B-VII-2006 2, 4C-VII-2006 2, 25A-VII-2008 1, 25C-VII-2008 1 and 30A-VIII-2009 1.



Sparganothis flavibasana, image from Moth Photographers Group web site

3717. *Sparganothis flavibasana* (Fern.) – 4C-VII-2006 1. New to Alberta.
 3720. *Sparganothis reticulatana* (Clem.) (Reticulated Fruitworm Moth) – 11-IX-2002 1.
 3740. *Platynota idaeusalis* (Wlk.) (Tufted Apple Bud Moth) – 8-VIII-2002 1 and 25B-VII-2008 1.

COCHYLIDAE – Cochylid Moths

The members of this family are currently being revised by Dr. Eric Metzler and Dr. John Brown. Some of the following specimens are now being examined by them.

- 3760-3763. *Platphalonidia prob lavana* (Bsk.) – 22-VI-2004 1.
 3764. *Cochylis nana* (Haw.) – 22-VI-2004 1.
Phtheocroa sp. – 9-VII-2002 1.
 3787. *Phtheochroa vitellinana* (Zell.) – 22-VI-2004 3.
 3791. *Phtheochroa ? aureoalbida* (Wlsm.) – 22-VI-2004 1.
 3792. *Phtheochroa fulviplicana* (Wlsm.) – 8-VIII-2002 2, 22-VI-2004 1, 29-VI-2005 2, 4A-VII-2006 1, 30B-VIII-2009 1 and 30C-VIII-2009 1.
 3796. *Phtheochroa waracana* (Kft.) – 8-VIII-2002 1, 8A-VII-2003 2 and 9A-IX-2006 1.
 3922.31 *Aethes heleniana ?* – 8-VIII-2002 1.
 3844. *Aethes promptana* (Rob.) – 22-VI-2004 1.

HESPERIIDAE – Skippers

3945. *Erynnis icelus* Scudder & Burgess (Dreamy Duskywing) – 12-VI-2003 1 JV.

PAPILIONIDAE - Swallowtails

- 4176a. *Papilio glaucus canadensis* R. & J. (Canadian Tiger Swallowtail) – 6-VI-2002 1 JV.

PIERIDAE – White and Sulphur Butterflies

4194. *Pontia occidentalis* (Reak.) (Western Checkered White) – 24-VII-2002 1 JV and 15-IX-2002 1.
 4209. *Colias philodice* Godt. (Clouded Sulphur) – 15-VI-2002 1 JV, 28 IX-2002 1 JV, 30-X-2001 2, 15-IX-2002 50 SR and 17-VI-2003 1 JV.

LYCAENIDAE – Blues and Hairstreaks

4362. *Everes amyntula* (Bdv.) (Western Tailed Blue) – 15-VI-2002 1 JV.
 4363. *Celastrina ladon* (Cram.) (Spring Azure) – 16-V-2003 1 JV.
 4372a. *Glaucopsyche lygdamus couperi* Grt. (Silvery Blue) – 15-VI-2002 1 JV and 17-VI-2003 1 JV.

NYMPHALIDAE - Fritillaries

4422. *Polygonia satyrus* (Edw.) (Satyr Anglewing) – 6-IX-2002 1 JV.
 4423. *Polygonia faunus* (Edw.) (Green Comma) - 9-IX-2007 1
 4432. *Nymphalis antiopa* (L.) (Mourning Cloak) – 24-VII-2002 1 JV and 15-IX-2002 1 SR.
 4435. *Vanessa cardui* (L.) (Painted Lady) – 30-X-2001 1.
 4450c. *Speyeria cybele pseudocarpenteri* (Cherm. & Cherm.) (Great Spangled Fritillary) – 24-VII-2002 1 JV.
 4451. *Speyeria aphrodite* (F.) (Aphrodite Fritillary) – 13-IX-2009 1.
 4465. *Boloria bellona* (Fabr.) (Meadow Fritillary) – 15-VI-2002 1 JV.
 4481. *Phyciodes cocyta* (Cram.) (Northern Pearl Crescent) – 18-VII-2002 1 JV.

SATYRIDAE – Arctics and others

- 4583b. *Coenonympha inornata benjamini* McD. (Common Ringlet) – 15-VI-2002 1 JV and 17-VI-2003 2 JV.
 4587f. *Cercyonis pegala ino* Hall (Common Wood Nymph) – 24-VIII-2002 1 JV and 13-IX-2009 1.
 4599. *Erebia episodea* Butler (Common Alpine) – 15-VI-2002 1 JV.

LIMACODIDAE – Slug Caterpillar Moths

4652. *Tortricidia testacea* Pack. – 22-VI-2002 1 JV, 2-VII-2003 1 JV, 22-VI-2004 1 and 29A-VI-2005 1.

PYRALIDAE – Pyralid or Snout Moths

4716. *Scoparia biplagiata* Wlk. (Double-striped Scoparia Moth) – 8-VIII-2002 1, 26-VIII-2002 5, 11-IX-2002 3 and 30A-VII-2003 1, 4A-VII-2006 1, 25A-VII-2008 1, 25B-VII-2008 1, 25C-VII-2008 1 and 30A-VIII-2009 1..

4755. *Synclita oblitalis* (Wlk.) (Waterlily Leafcutter Moth) – 26-VIII-2002 1, 29A-VIII-2007 3 and 29B-VIII-2007 1.
4897. *Evergestis pallidata* (Hufn.) (Purple-backed Cabbageworm Moth) – 4A-VII-2006 1 and 25B-VII-2008 2.
4950. *Fumibotys fumalis* (Gn.) (Mint Root Borer Moth) – 8-VIII-2002 1 and 19-VIII-2004 1.
4951. *Perispasta caeculalis* Zell. (Titian Peale's Pyralid Moth) – 20-VI-2002 1 JV, 17A-VI-2003 1, 17C-VI-2003 1 and 25A-VII-2008 1.
4957. *Muturaia mysippusalis* (Wlk.) – 25B-VII-2008 1.
4974. *Achyra bifidalis* (F.) – 9-VII-2002 1. This specimen has turned out to belong to an undescribed Pyralid which Dr. Alma Solis thinks may be in the genus *Aglossa*.
4987. *Sitochroa chortalis* (Grt.) (*Sitochroa* Moth) – 23-V-2001 1.
4995. *Loxostege lepidalis* (Hulst) – 24-VIII-2002 1 JV.
5004. *Loxostege sticticalis* (L.) (Beet Webworm) – 23-V-2001 3, 17A-VI-2003 1, 17B-VI-2003 1, 17-VI-2003 1 JV, 8A-VII-2003 1, 8B-VII-2003 1, 22A-VIII-2003 1, 22B-VIII-2003 1, 22C-VIII-2003 1, 22-VI-2004 2, 4C-VII-2006 1 and 30A-VIII-2009 1.
5032. *Pyrausta nicalis* (Grt.) – 8A-VII-2003 1.
5065. *Pyrausta scurralis* (Hulst) – 25B-VII-2008 1 and 25C-VII-2008 1. A western species, otherwise known in Alberta only from the Buffalo Lake Conservation Area and an area south of Alix.
5068. *Pyrausta unifascialis* (Pack.) – 8B-VII-2003 1 and 22-VI-2004 1.
5075. *Pyrausta socialis* (Grt.) – 9-VII-2002 2, 30C-VII-2003 1 and 4A-VII-2006 3.
5128. *Choristostigma plumbosignalis* (Fern.) – 4B-VII-2006 1 and 4C-VII-2006 1.
5135. *Mecyna submedialis* (Grt.) (Orange-roned *Mecyna* Moth) – 9-VII-2002 4, 8A-VII-2003 3, 30B-VII-2003 1, 30C-VII-2003 1, 22B-VIII-2003 1, 4A-VII-2006 2, 4C-VII-2006 1, 9C-IX-2006 1 and 25A-VII-2008 1.
5137. *Mecyna mustelinalis* (Pack.) – 8A-VII-2003 2 and 8B-VII-2003 1.
5156. *Nomophila nearctica* Mun. – 8A-VII-2003 2, 22B-VIII-2003 1 and 30A-VIII-2003 1.
5299. *Acentria ephemerella* (Olivier) (Water Veneer Moth) – 26-VIII-2002 3, 11-IX-2002 4, 8A-VII-2003 2, 8B-VII-2003 2, 30B-VII-2003 2, 30C-VII-2003 1, 22B-VIII-2003 1, 22C-VIII-2003 2, 29B-VIII-2007 1 and 29C-VIII-2007 1. Reported as new for Alberta in Pohl et al. (2005).
5316. *Donacaula melinella* (Clem.) (Delightful *Donacaula* Moth) – 4A-VII-2006 1 and 4B-VII-2006 2. These specimens have 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.) – 4A-VII-2006 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.
5343. *Crambus perlellus innotatellus* Wlk. – 9-VII-2002 1, 8-VIII-2002 1, 26-VIII-2002 2, 11-IX-2002 1, 8A-VII-2003 3, 30A-VII-2003 1, 19-VIII-2004 1, 4A-VII-2006 2, 4B-VII-2006 1, 4C-VII-2006 1, 25A-VII-2008 1 and 25C-VII-2008 1.
5352. *Crambus trichusalis* Hulst – 22C-VIII-2003 1.

5354. *Crambus ainsliellus* Klots - 26-VIII-2002 1, 11-IX-2002 1, 19-VIII-2004 2, 29B-VIII-2007 1, 9-IX-2007 1 and 30A-VIII-2009 1. These are probably *ainsliellus*. It and 5357 *Crambus leachellus* are difficult to separate.
5379. *Neodactria luteolella* Clem. (Mottled Grass-veneer Moth) – 4B-VII-2006 1 and 4C-VII-2006 1.
5391. *Chrysoteuchia topiaria* (Zell.) (Cranberry Girdler) – 9-VII-2002 3, 17C-VI-2003 1, 8A-VII-2003 1, 8B-VII-2003 1, 22A-VIII-2003 4, 22B-VIII-2003 2, 22C-VIII-2003 1, 30C-VIII-2003 1, 22-VI-2004 2, 29A-VI-2005 5, 4A-VII-2006 1, 4B-VII-2006 1 and 25C-VII-2008 1.
5397. *Agriphila ruricolella* (Zell.) (Lesser Vagabond Sod Webworm Moth) – 8-VIII-2002 1, 26-VIII-2002 1, 30A-VII-2003 1, 30C-VII-2003 1, 19-VIII-2004 1, 25A-VII-2008 1, 25C-VII-2008 1, 30A-VIII-2009 1, 30B-VIII-2009 1 and 30C-VIII-2009 1.
5403. *Agriphila vulgivagella* (Clem.) (Vagabond Crambus Moth) - 22B-VIII-2003 2 and 29A-VIII-2007 1.
5404. *Agriphila attenuata* (Grote) – 22-VIII-2003 2. Not previously known from Alberta. *Pediasia* indet. – 30A-VII-2003 1. Originally thought to be *Neodactria zeella*, this may be an undescribed species of *Pediasia*, *P. aridella edmontella* or *P. laciniellus*.
5411. *Pediasia truncatella* (Zett.) – 22-VI-2004 1.
5413. *Pediasia trisecta* (Wlk.) (Sod Webworm Moth) – 26-VIII-2002 1, 11-IX-2002 3, 5-VIII-2003 1, 22A-VIII-2003 3, 22B-VIII-2003 4, 22C-VIII-2003 5, 19-VIII-2004 1, 25C-VIII-2006 1, 29A-VIII-2007 1, 29B-VIII-2007 1, 30A-VIII-2009 1, 30B-VIII-2009 1 and 30C-VIII-2009 1.
5415. *Pediasia ericella* (B. & McD.) – 9-VII-2002 1 and 8A-VII-2003 1.
5417. *Pediasia dorsipunctella* (Kft.) – 8-VIII-2002 11, 26-VIII-2002 6, 11-IX-2002 2, 8A-VII-2003 1, 30B-VII-2003 1, 19-VIII-2004 2 and 25A-VII-2008 1.
- 5441a. *Thaumatopsis fernaldella nortella* Kft. – 26-VIII-2002 1 and 4A-VII-2006 1.
5474. *Acigona comptulatilil* (Hulst) – 26-VIII-2002 1.
5606. *Tetralopha asperatella* (Clem.) (Maple Webworm Moth) – 17A-VI-2003 1, 8B-VII-2003 1.
5655. *Acrobasis tricolorella* Grt. (Tricolored Acrobasis Moth) – 9-VII-2002 3, 8A-VII-2003 1, 8B-VII-2003 6, 29A-VI-2005 1, 4A-VII-2006 3 and 25C-VII-2008 1.
5718. *Myelopsis subtetricella* (Rag.) – 23-V-2001 2, 3-VI-2002 4, 12-VI-2002 4 and 17A-VI-2003 2, 27-V-2004 2, 30B-V-2006 3, 30C-V-2006 1 and 30A-VIII-2009 1.
5721. *Apomyelois bistriatella* (Hulst) – 4B-VII-2006 1 and 25B-VII-2008 1.
5759. *Ambesa laetella* Grt. – 9-VII-2002 1.
5787. *Meroptera pravella* (Grt.) (Lesser Aspen Webworm) – 23-V-2001 1, 17A-VI-2003 3, 17C-VI-2003 1 and 27-V-2004 1.
5799. *Nephtopterix basilaris* Zell. – 23-V-2001 2, 9-VII-2002 1 and 27B-VI-2003 1.
5827. *Pyla aenigmatica* Heinr. – 30C-VII-2003 1.
5829. *Pyla fusca* (Haw.) (Speckled Black Pyla Moth) – 22A-VIII-2003 1 and 25C-VII-2008 1.
5841. *Dioryctria abietivorella* (Grt.) – 25B-VII-2008 1.
5843. *Dioryctria reniculelloides* Mutuura & Mun. (Spruce Coneworm Moth) – 9-VII-2002 1, 30A-VII-2003 1 and 19-VIII-2004 1.

5844. *Dioryctria pseudotsugella* Mun. (Douglas Fir coneworm) – 26-VIII-2002 1 and 30A-VII-2003 1. Not reported for Alberta by Bowman (1951). Amanda Roe, who identified the specimen and who is studying the genus, mentioned that she had not expected it this far northeast. It is closely related to *Dioryctria reniculelloides*.
5887. *Lipographis leoninella* (Pack.) – 22A-VIII-2003 3 and 22C-VIII-2003 2.
5918. *Hulstia undulatella* (Clem.) (Sugarbeet Crown Borer Moth) – 30C-VIII-2009 1.
5946. *Phycitoides mucidellum* (Rag.) – 25B-VIII-2006 1.
5968. *Zophodia grossulariella* (Hbn.) (Gooseberry Fruitworm Moth) – 3-VI-2002 1, 14A-V-2003 1, 27-V-2004 1 and 11B-V-2007 1.
5999. *Eulogia ochrifrontella* (Zell.) (Broad-banded Eulogia Moth) – 25B-VII-2008 1.
6007. *Vitula serratilineella* Rag – 22A-VIII-2003 1, 19-VIII-2004 1 and 25B-VIII-2006 1.
6038. *Anerastia lotella* (Hbn.) – 8-VIII-2002 2, 26-VIII-2002 1 and 30C-VII-2003 1.
6053. *Peoria approximella* (Wlk.) (Carmine Snout Moth) – 4C-VII-2006 1.

PTEROPHORIDAE – Plume Moths

- 6092-6234. Indet Pterophorids – 30-VII-2003 7, 29A-VI-2005 1, 4-VII-2006 2, 25-VIII-2006 3 and 9-IX-2006 4. These specimens are currently being examined by Doug Macaulay.
6094. *Capperia ningoris* (Wlsm.) – 8-VIII-2003 1.
6102. *Dejongia (Trichoptilus) lobidactyla* (Fitch) – 4-VII-2006 1.
6130. *Paraplatyptilia albiciliata* (Wlsm.) – 8-VII-2003 1.
6166. *Oidaematophorus mathewianus* (Zell.) (Mathew's Plume Moth) – 4-VII-2006 3, 25A-VII-2008 1 and 25C-VII-2008 1.
6205. *Hellinsia pectodactylus* (Staudinger) – 4-VII-2006 1.
6232. *Hellinsia arion* (B. & L.) – 30-VII-2003 2.
6234. *Emmelina monodactyla* (L.) (Morning Glory Plume Moth) – 30-VII-2003.

THYATIRIDAE – Thyatirid Moths

6235. *Habrosyne scripta* (Gosse) (The Scribe or Lettered Habrosyne) – 30B-V-2006 1.
6240. *Euthyatira pudens* (Gn.) (Dogwood Thyatira) – 1-V-2003 1 JV and 11B-V-2007 1.
6248. *Ceranemota albertae* Clarke (Alberta Lutestring) – 26-VIII-2002 2, 22A-VIII-2003 1, 22C-VIII-2003 1, 19-VIII-2004 1, 25A-VIII-2006 1, 25B-VIII-2006 1, 25C-VIII-2006 1, 29A-VIII-2007 1, 29B-VIII-2007 1 and 30A-VIII-2009 1.

DREPANIDAE – Hooktip Moths

6251. *Drepana arcuata* Wlk. (Arched Hook-tip) – 22-VI-2002 1 JV.
6252. *Drepana bilineata* (Pack.) (Two-lined Hooktip) – 4B-VII-2006 2.
6255. *Oreta rosea* (Wlk.) (Rose Hooktip) – 29-VI-2002 1 JV.

GEOMETRIDAE – Inchworm or Geometrid Moths

6270. *Protitame virginalis* (Hulst) (Virgin Moth) – 17A-VI-2003 1, 30C-VII-2003 1, 22-VI-2004 1 and 29A-VI-2005 2.
6279. *Itame (Itame) occiduaria* (Pack.) (Western Sulphur) – 10-VI-2002 1 JV, 9-VII-2002 1, 8A-VII-2003 1, 8B-VII-2003 1, 30B-VII-2003 1, 30C-VII-2003 1, 22-VI-2004 4, 29A-VI-2005 1, 29B-VI-2005 1, 4A-VII-2006 1 and 4B-VII-2006 1.
6283. *Macaria (Itame) sulphurea* (Pack.) (Spotted Sulphur) – 15-VII-2001 1 and 27-VII-2002 1.
6290. *Macaria (Itame) loricaria* (Evers.) (False Bruce Spanworm) – 20-VI-2002 1 JV, 8A-VII-2003 1, 30B-VII-2003 1, 29A-VI-2005 1, 29B-VI-2005 1, 4A-VII-2006 2, 4B-VII-2006 1 and 4C-VII-2006 1.
6292. *Macaria (Itame) exauspicata* (Wlk.) (Speckled Granite) – 9-VII-2002 1.
6344. *Macaria (Semiothisa) signaria* (Hbn.) (Pale Marked Angle) – 20-VI-2002 1 JV and 29A-VI-2005 1.
6373. *Digrammia (Semiothisa) denticulata* Grt. (Striped Granite) – 3-VI-2002 2, 8-VIII-2002 2, 17-VIII-2002 1 CBC, 11-IX-2002 1, 8A-VII-2003 1, 27-V-2004 3 and 19-VIII-2004 1.
6380. *Digrammia (Semiothisa) californiaria* (Pack) – 30A-VIII-2009 1.
6389. *Digrammia decorata* (Grossb.) (*Semiothisa arubrescens* McD.) – 30-VIII-2002 1 JV.
6394. *Digrammia rippertaria* (Dup.) (*Semiothisa hebetata* (Hulst)) – 9-VII-2002 1, 17A-VI-2003 1, 8A-VII-2003 1, 8B-VII-2003 1, 22-VI-2004 2, 29A-VI-2005 1, 4A-VII-2006 2, 4B-VII-2006 1 and 4C-VII-2006 1.
6396. *Digrammia (Semiothisa) neptaria* (Gn.) – 24-VIII-2002 1 JV, 26-VIII-2002 1, 30C-VII-2003 1, 27-V-2004 2, 22-VI-2004 1, 19-VIII-2004 2 and 4A-VII-2006 1.
6397. *Digrammia (Semiothisa) mellistrigata* (Grt.) – 6-IX-2002 1 JV, 8A-VII-2003 1, 19-VIII-2004 1, 29A-VI-2005 1 and 30A-VIII-2009 1.
6431. *Hesperumia sulphuraria* Pack. (Sulphur Moth) – 4A-VII-2006 1, 25A-VII-2008 1, 25B-VII-2008 1 and 25C-VII-2008 1.
6570. *Aethalura intertexta* (Wlk.) (Smoky Carpet) – 14A-V-2003 1.
6597. *Ectropis crepuscularia* (D. & S.) (The Small Engrailed) – 23-V-2001 2 and 23-V-2003 1 JV.
6640. *Biston betularia* (L.) (Salt-and-Pepper Moth) – 9-VII-2002 3 and 17-VIII-2002 1 JV.
6651. *Lycia ursaria* (Wlk.) (The Bear or the Stout Spanworm Moth) – 2-V-2003 1 JV and 11A-V-2007 1.
6654. *Hypagyrtis unipunctata* (Haw.) (One-spotted Variant) – 19-VI-2002 1 JV, 9-VII-2002 2 and 8B-VII-2003 1.
6665. *Erranis tiliaria* (Harr.) (Linden Looper Moth) – 22-IX-2002 1 JV and 9B-IX-2006 1.
6677. *Cabera erythemaria* Gn. (Yellow-dusted Cream Moth) – 9-VII-2002 2 and 29A-VI-2005 2, 30B-V-2006 1, 4A-VII-2006 1, 4B-VII-2006 2, 4C-VII-2006 1, 29A-VIII-2007 1, 29B-VIII-2007 1, 25B-VII-2008 1 and 25C-VII-2008 1.
6678. *Cabera variolaria* Gn. (Pale Striped Willow Spanworm) – 9-VI-2002 1 JV, 9-VII-2002 2, 29A-VI-2005 2, 29A-VIII-2007 1, 29B-VIII-2007 1, 29C-VIII-2007 1 and 25C-VII-2008 1.
6715. *Aspitates aberratus* (Hy. Edw.) – 23-V-2001 3, 27-V-2004 1 and 30A-V-2006 1.

6726. *Euchlaena obtusaria* (Hbn.) (Obtuse *Euchlaena*) – 9-VI-2002 1 JV.
6729. *Euchlaena johnsonaria* (Fitch) (Johnson's *Euchlaena*) – 29-VI-2002 1 JV, 9-VII-2002 1, 8A-VII-2003 1, 8B-VII-2003 1, 4A-VII-2006 1, 4B-VII-2006 1, 4C-VII-2006 1 and 29A-VIII-2007 1.
6731. *Euchlaena madusaria* (Wlk.) – 9-VII-2002 1.
6734. *Euchlaena marginaria* (Minot) (Ochre *Euchlaena*) – 23-V-2001 1, 3-VI-2002 1, 7-VI-2002 1 JV, 10-VI-2002 1 JV and 12-VI-2002 1.
6737. *Euchlaena tigrinaria* (Gn.) (Mottled *Euchlaena* or Variable Thorn) – 29-VI-2002 1 JV, 8A-VII-2003 1, 8B-VII-2003 1, 4A-VII-2006 1, 4B-VII-2006 1, 25B-VII-2008 1 and 25C-VII-2008 1.
6743. *Xanthotype sospeta* (Drury) (Crocus Geometer) – 28-VIII-2002 1 JV, 8A-VII-2003 1, 29A-VI-2005 1, 4A-VII-2006 1, 4B-VII-2006 1 and 25C-VII-2008 1.
6755. *Pero morrisonaria* (Hy. Edw.) (Lesser Umber) – 23-V-2001 1 and 19-VI-2002 1 JV.
6796. *Campaea perlata* (Gn.) (Pale Beauty or Fringed Looper Moth) – 4A-VII-2006 1, 4B-VII-2006 1, 25B-VII-2008 1, 25C-VII-2008 1 and 30A-VIII-2009 1.
6797. *Ennomos magnaria* Gn. (Maple Spanworm) – 17-VIII-2002 1 JV, 30-VIII-2002 1 JV, 11-IX-2002 1, 22B-VIII-2003 1, 13C-IX-2003 1 and 29B-VIII-2007 1.
6817. *Selenia alciphearia* Wlk. (Northern *Selenia*) – 23-V-2001 1, 29-VI-2002 1 JV, 24-V-2003 1 JV and 26B-V-2007 1.
6818. *Selenia kentaria* (G. & R.) (Kent's Geometer) – 23-V-2001 1, 30B-V-2006 1 and 11B-V-2007 1.
6819. *Metanema inatomaria* Gn. (Pale *Metanema*) – 14-VI-2002 1 JV and 30B-V-2006 1.
6820. *Metanema determinata* Wlk. (Dark *Metanema*) – 9-VII-2002 1, 2-VII-2003 1 JV, 22-VI-2004 1, 29A-VI-2005 1, 30A-V-2006 1, 4A-VII-2006 1 and 4C-VII-2006 1.
6822. *Metarranthis duaria* (Gn.) (Ruddy *Metarranthis*) – 23-V-2001 3, 3-VI-2002 4, 12-VI-2002 1, 29-VI-2002 1 JV, 30A-V-2006 2, 30B-V-2006 2 and 30C-V-2006 1.
6836. *Anagoga occiduaria* (Wlk.) (American Barred Umber) – 23-V-2001 1, 3-VI-2002 1 and 12-VI-2002 1.
6837. *Probole alienaria* (H.-S.) – 23-V-2001 2, 3-VI-2002 3 and 12-VI-2002 1, 30A-V-2006 1, 30B-V-2006 1 and 30C-V-2006 1.
6838. *Probole amicaria* (H.-S.) (Friendly *Probole*) – 12-VI-2002 1 JV and 29A-VI-2005 1.
6842. *Plagodis phlogosaria* (Gn.) (Straight-lined *Plagodis*) – 23-V-2001 1, 3-VI-2002 4, 17-V-2003 1 JV and 27-V-2004 1.
6863. *Caripeta divisata* Wlk. (Gray Spruce Looper) – 29A-VI-2005 1.
6912. *Sicya macularia* (Harr.) (Pink-bordered Yellow) – 4A-VII-2006 1, 4B-VII-2006 1, and 25B-VII-2008 2.
6954. *Synaxis jubararia* (Hulst) (October Thorn) – 28-IX-2002 1 JV, 9A-IX-2006 1, 9B-IX-2006 1 and 9C-IX-2006 1.
6963. *Tetracis crocallata* Gn. (Yellow Slant-line) – 3-VI-2002 1, 16-VI-2002 1 JV, 9-VII-2002 1, 30A-V-2006 1 and 30B-V-2006 1.
6982. *Prochoerodes transversata* (Drury) (Large Maple Spanworm) – 17-VIII-2002 1 JV, 24-VIII-2002 1 JV, 26-VIII-2002 1, 11-IX-2002 1, 19-VIII-2004 1, 9A-IX-2006 1, 29A-VIII-2007 1, 30A-VIII-2009 1 and 30B-VIII-2009 1.

7009. *Nematocampa resistaria* (H.-S.) (Horned Spanworm Moth) – 24-VII-2002 1 JV, 25B-VII-2008 1 and 25C-VII-2008 1.
7018. *Nemoria unitaria* (Pack.) – 14-VI-2002 1 JV, 9-VII-2002 1, 25B-VII-2008 1 and 25C-VII-2008 1.
7058. *Synchlora aerata* (F.) (Wavy-lined Emerald) – 4A-VII-2006 1, 4B-VII-2006 1 and 9C-IX-2006 1.
7125. *Idaea rotundopennata* (Pack.) (Round-winged Wave) – 22-VI-2004 2.
7159. *Scopula limboundata* (Haw.) (Large Lace-border) – 9-VII-2002 3, 25B-VII-2008 1 and 30A-VIII-2009 1.
7162. *Scopula ancellata* (Hulst) – 8-VIII-2002 1.
7169. *Scopula inductata* Gn. – 30A-VII-2003 1, 29A-VI-2005 1, 4A-VII-2006 1, 4C-VII-2006 1, 9A-IX-2006 1, 9B-IX-2006 1, 9C-IX-2006 2 and 25B-VII-2008 1.
7180. *Leptostales ferruminaria* (Zell.) – 23-V-2001 3 and 23-V-2003 1 JV.
7182. *Dysstroma citrata* (L.) (Dark Marbled Carpet) – 19-VIII-2004 1, 29A-VIII-2007 1 and 29B-VIII-2007 1.
7187. *Dysstroma truncata* (Hufn.) (Marbled Carpet) – 17-VIII-2002 1 CBC and 24-VIII-2002 1 JV.
7199. *Eulithis propulsata* (Wlk.) (Barred Yellow or Currant Eulithis) – 25A-VII-2008 1 and 25B-VII-2008 1.
7201. *Eulithis testata* (L.) (Chevron Moth) – 30-VIII-2002 1 JV, 1-IX-2002 1 JV, 30A-VIII-2009 1 and 30B-VIII-2009 1.
7205. *Eulithis flavibrunneata* (McD.) – 30B-VIII-2009 1.
7206. *Eulithis explanata* (Wlk.) (White Eulithis) – 8-VIII-2002 1, 25B-VII-2008 1 and 25C-VII-2008 1.
7207. *Eulithis xyliana* (Hulst) (The Phoenix) – 9-VII-2002 1, 2-VII-2003 1 JV, 4A-VII-2006 2 and 4B-VII-2006 1.
7235. *Hydriomena divisaria* (Wlk.) – 12-VI-2002 1.
7254. *Hydriomena ruberata* (Frey.) – 23-V-2001 3, 8-VI-2002 1 JV and 12-VI-2002 2.
7257. *Hydriomena furcata* (Thunb.) (Common Highflyer) – 8-VIII-2002 1, 26-VIII-2002 1 and 19-VIII-2004 1.
7291. *Hydria undulata* (L.) (Scallop Shell) – 8B-VII-2003 1.
7316. *Perizoma basaliata* (Wlk.) – 25C-VII-2008 1.
7328. *Perizoma custodiata* (Gn.) – 17B-VI-2003 1 and 27-V-2004 1.
7329. *Anticlea vasiliata* Gn. (Variable Carpet) – 23-V-2001 1 and 17-V-2003 1 JV.
7368. *Xanthorhoe labradorensis* (Pack.) – 12-VI-2002 1.
7370. *Xanthorhoe abrasaria* (H.-S.) – 29A-VI-2005 2 and 4B-VII-2006 1.
7384. *Xanthorhoe decoloraria* (Esper) – 8-VIII-2002 1.
7394. *Epirrhoe alternata* (Müller) (White-banded Toothed Carpet) – 4A-VII-2006 1 and 4C-VII-2006 1.
7399. *Euphyia unangulata* (Haw.) (Sharp-angled Carpet) – 8B-VII-2003 1.
7408. *Zenophleps alpinata* Cass. – 8-VIII-2002 1, 17-VIII-2002 1 JV, 17-VIII-2002 1 CBC, 24-VIII-2002 1 JV, 26-VIII-2002 1, 22B-VIII-2003 1, 19-VIII-2004 1, 25A-VIII-2006 1, 25B-VIII-2006 1, 9C-IX-2006 1, 29A-VIII-2007 1, 29B-VIII-2007 1 and 30A-VIII-2009 1.
7414. *Orthonama obstipata* (F.) – 10-VI-2002 1.
7423. *Hydrelia albifera* (Wlk.) (Fragile White Carpet) – 25B-VII-2008 1.

7429. *Venusia pearsalli* (Dyar) (Pearsall's Wave) – 23-V-2001 1.
 7445. *Horisme intestinata* (Gn.) (Brown Bark Carpet) – 9-VII-2002 1 and 4A-VII-2006 1.
 7459. *Eupithecia columbiata* (Dyar) – 3-VI-2002 2.
 7487. *Eupithecia subfuscata* (Haw.) – 23-V-2001 2.
 7528. *Eupithecia assimilata* Doubleday – 12-VI-2002 1.
 7574. *Eupithecia albicapitata* Pack. – 22-VI-2004 1.
 7605. *Eupithecia ravocostaliata* Pack. (Great Variegated Pug) – 23-V-2001 1, 23-V-2003 2 JV and 11B-V-2007 1.
 7639. *Cladara atroliturata* (Wlk.) (The Scribbler) – 14A-V-2003 1 and 17-V-2003 1 JV.
 7640. *Lobophora nivergerata* Wlk. (Two-lined Aspen Looper) – 17C-VI-2003 1.

URANIIDAE – Uraniid Moths

7650. *Callizia amorata* Pack. (Gray Scoopwing) – 23-VI-2002 1.

LASIOCAMPIDAE – Tent Caterpillar and Lappet Moths

7687. *Phyllodesma americana* (Harr.) (Lappet Moth) – 230V-2001 2, 3-VI-2002 1, 12-VI-2002 1, 12-VI-2002 1 JV, 28-V-2004 1 and 30B-V-2006 1.
 7698. *Malacosoma disstria* Hbn. (Forest Tent Caterpillar) – 9-VII-2002 1 and 4C-VII-2006 1.
 7702. *Malacosoma californicum* (Pack.) (Western Tent Caterpillar) – 9-VII-2002 1, 9-VIII-2002 1, 8A-VII-2003 1, 30B-VII-2003 1, 30C-VII-2003 1, 29A-VI-2005 1 and 4A-VII-2006 1.

SATURNIDAE – Large Silkworm Moths

7757. *Antheraea polyphemus* (Cram.) (Polyphemus Moth) – 23-V-2001 2, 23-V-2002 2, 8-VI-2002 1 JV, 12-VI-2002 2, 27-V-2004 1 and 22-VI-2004 1.
 7769. *Hyalophora gloveri* (Stkr.) (Glover's Silk-moth) – 27-V-2003 1 JV.

SPHINGIDAE – Sphinx Moths

7803. *Sphinx vashti* Stkr. (Vashti or Snowberry Sphinx) – 23-V-2001 4, 31-V-2002 1 JV, 3-VI-2002 1, 17A-VI-2003 1, 28A-V-2004 2, 28B-V-2004 4 SR, 22-VI-2004 1, 29A-VI-2005 1 and 4B-VII-2006 1.
 7811. *Sphinx luscitiosa* Clem. (Clemen's Sphinx Moth) – 17C-VI-2003 1. Rare in Alberta.
 7812. *Sphinx drupiferarum* J.E. Smith (Wild Cherry Sphinx) – 28B-V-2004 1. Also rare in Alberta.
 7821. *Sphinx jamaicensis* (Drury) (Twin-spotted Sphinx) – 29-VI-2002 1 JV, 28-V-2004 1, 22A-VI-2004 1 SR, 22B-VI-2004 2 SR and 30A-V-2006 1.
 7822. *Smerinthus cerisyi* Kby. (One-eyed Sphinx) – 23-V-2001 2, 3-VI-2002 1, 7-VI-2002 1, 12-VI-2002 1, 28A-V-2004 3 SR, 22A-VI-2004 3 SR, 22B-VI-2004 4 SR, 30B-V-2006 1, 29A-VIII-2007 1 and 25C-VII-2008 1.

7824. *Paonias excaecatus* (J.E. Smith) (Blinded Sphinx) – 17A-VI-2003 1, 17B-VI-2003 1, 13-VII-2003 1 JV, 27-V-2004 1, 22A-VI-2004 1 (3 SR), 22B-VI-2004 2 SR and 30A-V-2006 1.
7825. *Paonias myops* (J.E. Smith) (Small-eyed Sphinx) – 23-V-2001 1, 29-VI-2002 1 JV and 25B-VII-2008 1.
7828. *Pachysphinx modesta* (Harr.) (Big Poplar Sphinx) – 14-VI-2002 1 JV, 27-V-2004 2, 22-VI-2004 1 and 4B-VII-2006 1.
7893. *Hyles gallii* (Rottemburg) (Galium Sphinx or Bedstraw Hawkmoth) – 29A-VI-2005 1.

NOTODONTIDAE – Prominent Moths

7895. *Clostera albosigma* Fitch (Sigmoid Prominent) – 23-V-2001 4, 6-VI-2002 1 JV, 12-VI-2002, 29A-VI-2005 1, 4A-VII-2006 1, 25B-VII-2008 1 and 25C-VII-2008 1.
7898. *Clostera strigosa* (Grt.) (Striped Chocolate-tip Moth) – 30C-V-2006 1.
7901. *Clostera apicalis* (Wlk.) (Common Chocolate-tip or Red-marked Tentmaker) – 23-V-2001 3, 3-VI-2002 1, 27-V-2004 1, 30A-V-2006 1, 30B-V-2006 1 and 30C-V-2006 1.
7915. *Nadata gibbosa* (J.E. Smith) (White-dotted Prominent) – 3-VI-2002 1, 20-VI-2002 1 JV, 29-VI-2002 1 JV, 8A-VII-2003 1, 22B-VI-2004 2 (4 SR), 29A-VI-2005 1, 30C-V-2006 1, 4B-VII-2006 1 and 25B-VII-2008 1..
7922. *Pheosia rimosa* Pack. (Black-rimmed Prominent) – 9-VII-2002 1, 30A-V-2006 1, 30B-V-2006 1, 30C-V-2006 1, 4A-VII-2006 1, 29A-VIII-2007 1 and 25C-VII-2008 1.
7924. *Odontosia elegans* (Stkr.) (Elegant Prominent) – 9-VII-2002 1, 1-VII-2003 1 JV, 22-VI-2004 1 and 4A-VII-2006 1.
7926. *Notodonta scitipennis* Wlk. (Base-streaked Prominent) – 8A-VII-2003 1.
7928. *Notodonta simplaria* Graef (Simple Prominent) – 23-V-2001 2, 3-VI-2002 2, 12-VI-2002 1, 17-VIII-2002 1 JV, 24-V-2003 1 JV, 27-V-2004 1, 22-VI-2004 1 and 30C-V-2006 1. Now regarded as synonymous with the Old World *Notodonta torva* (Hübner).
7931. *Gluphisia septentrionis* Wlk. (Small Pebble or Common Gluphisia) – 9-VII-2002 1, 29A-VI-2005 1, 30B-V-2006 1, 4A-VII-2006 1, 4B-VII-2006 1 and 4C-VII-2006 1.
7939. *Furcula occidentalis* (Lint.) (Willow Kitten) – 29A-VI-2005 1.
7940. *Furcula scolopendrina* (Bdv.) (Poplar Kitten) – 22-VI-2004 1.
8007. *Schizura unicornis* (J.E. Smith) (Variegated Prominent) – 23-V-2001 1, 4A-VII-2006 1, 4B-VII-2006 1, 29A-VIII-2007 1 and 25B-VII-2008 1.
8011. *Schizura leptinoides* (Grt.) (Black-blotched Schizura) – 22-VI-2002 1 JV.
8012. *Oligocentria semirufescens* (Wlk.) (Red-washed Prominent) – 4A-VII-2006 1, 4B-VII-2006 1 and 25C-VII-2008 1.

ARCTIIDAE – Tiger Moths and others

8043. *Eilema bicolor* (Grt.) (Bicolored Moth) – 8-VIII-2002 3, 15-VIII-2002 1 JV, 26-VIII-2002 2, 11-IX-2002 2, 30B-VII-2003 1, 19-VIII-2004 1, 25B-VII-2008 1 and 25C-VII-2008 1.
8051. *Crambidia casta* (Pack.) (Pearly-winged Lichen Moth) – 26-VIII-2002 1, 11-IX-2002 2, 11-IX-2002 1 JV, 22B-VIII-2003 1, 22C-VIII-2003 1, 19-VIII-2004 1 and 30C-VIII-2009 1.
8089. *Hypoprepia miniata* (Kby.) (Scarlet-winged Lichen Moth) – 4C-VII-2006 2.
8098. *Clemensia albata* Pack. (Little White Lichen Moth) – 4B-VII-2006 1, 25B-VII-2008 1 and 25C-VII-2008 1.
8123. *Holomelina ferruginosa* (Wlk.) (Rusty Holomelina) – 9-VII-2002 3, 24-VII-2002 1 JV, 9-VIII-2002 1, 8B-VII-2003 1, 4A-VII-2006 1, 4C-VII-2006 1, 25B-VII-2008 1 and 25C-VII-2008 1.
8129. *Pyrrharctia isabella* (J.E. Smith) (Isabella Tiger Moth) – 22-VI-2002 1 JV and 6-VII-2002 1.
8131. *Estigmene acraea* (Drury) (Salt Marsh Moth) – 12-VI-2002 1 JV.
8134. *Hyphantria (Spilosoma) congrua* (Wlk.) – 23-V-2001 1, 22-VI-2004 1, 30B-V-2006 1 and 30C-V-2006 1.
8137. *Spilosoma virginica* (F.) (Virginian Tiger Moth, Red-marked Tentmaker or Yellow Woolly-bear) – 23-V-2001 1 and 30C-V-2006 1.
8158. *Phragmatobia assimilans* Wlk. (Large Ruby Tiger Moth) – 23-V-2001 4, 31-V-2002 1 JV, 3-VI-2002 2, 28A-V-2004 2 SR, 28B-V-2004 2 SR and 28C-V-2004 2 SR, and 30B-V-2006 1.
8162. *Platarctia parthenos* (Harr.) (Saint Lawrence Tiger Moth) – 12-VI-2002 1 JV, 30B-V-2006 1 and 4C-VII-2006 1.
8166. *Arctia caja* (L.) (Great Tiger Moth) – 25A-VII-2008 1.
8175. *Grammia virguncula* (W. Kby.) (Little Virgin Moth) – 8A-VII-2003 1 and 8B-VII-2003 1.
8186. *Grammia williamsii* (Dodge) (William's Tiger Moth) – 9-VII-2002 1, 27-V-2004 1, 29A-VI-2005 2 and 4C-VII-2006 1.
8196. *Grammia parthenice* (W. Kby.) (Parthenice Tiger Moth) – 8-VIII-2002 3, 17-VIII-2002 1 CBC, 26-VIII-2002 1, 30B-VII-2003 1, 30C-VII-2003 1, 30B-VII-2006 1, 30C-VII-2006 1, 25A-VII-2008 1, 25B-VII-2008 1 and 25C-VII-2008 1.
8197. *Grammia virgo* (L.) (Virgin Tiger Moth) – 29-VI-2002 1 JV, 9-VII-2002 2, 8A-VII-2003 1, 8B-VII-2003 1, 4A-VII-2006 1, 4C-VII-2006 1 and 25B-VII-2008 1.
8214. *Lophocampa maculata* Harr. (Spotted Tussock Moth) – 14-VI-2002 1 JV.
8262. *Ctenucha virginica* (Esp.) (Virginia Ctenucha) – 29-VI-2002 1 JV.
8267. *Cissepis fulvicollis* (Hbn.) (Yellow-collared Scape Moth) – 4A-VII-2006 2.

LYMANTRIIDAE – Tussock Moths

8294. *Dasychira vagans* (B. & McD.) (Variable Tussock Moth) – 30-VI-2003 1 JV, 8B-VII-2003 1, 4A-VII-2006 1 and 25C-VII-2008 1.

NOCTUIDAE – Owlets or Noctuid Moths

8322. *Idia americalis* (Gn.) (American Snout Moth) – 9-VII-2002 1, 17-VIII-2002 1
CBC, 26-VIII-2002 1, 11-IX-2002 2, 8A-VII-2003 1, 8B-VII-2003 1, 30B-VII-
2003 1, 19-VIII-2004 1, 29A-VI-2005 1, 4A-VII-2006 1, 4B-VII-2006 1, 4C-VII-
2006 1, 9A-IX-2006 1, 9B-IX-2006 1, 25A-VII-2008 1, 25B-VII-2008 1, 25C-
VII-2008 1, 30A-VIII-2009 1 and 30B-VIII-2009 1.
8354. *Zanclognatha litalba* (Sm.) (The Canadian Zanclognatha) – 25B-VII-2008 1 and
25C-VII-2008 1.
8356. *Chytolita petrealis* Grt. (Lesser Luteous Snout) – 12-VI-2002 1, 17B-VI-2003 1,
17C-VI-2003 2 and 22-VI-2004 2.
8362. *Phalaenostola metonalis* (Wlk.) (Pale Phalaenostola or Tufted Snout) – 4A-VII-
2006 1, 4B-VII-2006 1 and 4C-VII-2006 1.
8370. *Bleptina caradrinalis* Gn. (Variable Snout Moth) – 9-VII-2002 1.
8397. *Palthis angulalis* (Hbn.) (Angulated Snout Moth) – 19-VI-2002 1 JV.
8404. *Rivula propinqualis* Gn. (Yellow Snout Moth) – 6-IX-2002 1 JV 4A-VII-2006 1,
4C-VII-2006 1, 9B-IX-2006 1, 25B-VII-2008 1, 25C-VII-2008 2 and 30A-VIII-
2009 1.
8413. *Mycterophora inexplicata* (Wlk.) (Pale-edged Snout-moth) – 17-VIII-2002 1 CBC,
25B-VII-2008 1 and 25C-VII-2008 1.
8421. *Hypenodes fractilinea* (Sm.) (Broken-line Hypenodes) – 8B-VII-2003 1.
8452. *Bomolocha edictalis* (Wlk.) (Large Bomolocha) - 29A-VIII-2007 1
8461. *Hypena humuli* Harr. (Hop-vine Snout Moth) – 11-IX-2002 1.
8555. *Scoliopteryx libatrix* (L.) (The Herald) – 30B-V-2006 2.
8697. *Zale minerea* (Gn.) (Colorful Zale) – 23-V-2001 14 and 3-VI-2002 1.
8731. *Euclidea cuspea* (Hbn.) (Pointed Grass Moth) – 23-V-2001 2, 14-VI-2002 1 JV
and 17-VI-2003 1 JV.
8738. *Caenurgina crassiuscula* (Haw.) (Clover Looper Moth) – 23-V-2001 5, 29-VI-2002
1 JV, 26-VIII-2002 1, 17A-VI-2003 1, 30B-VII-2003 1, 27-V-2004 1, 19-VIII-
2004 1, 30A-V-2006 1, 30C-V-2006 1, 4A-VII-2006 1, 4B-VII-2006 1, 4C-VII-
2006 1 and 9C-IX-2006 1.
8739. *Caenurgina erechtea* (Cram.) (Forage Looper Moth) – 25A-VII-2008 1.
8803. *Catocala relictata* Wlk. (White Underwing) – 8-VIII-2002 1, 17-VIII-2002 1 JV, 11-
IX-2002 2, 22A-VIII-2003 1 SR, 22B-VIII-2003 1 SR and 22C-VIII-2003 1 SR.
8805. *Catocala unijuga* Wlk. (Once-married Underwing) – 25B-VII-2008 1.
8817. *Catocala briseis* Edw. (Ribbed or Briseis Underwing) – 8-VIII-2002 1, 26-VIII-
2002 1, 1-IX-2002 1 JV, 13C-IX-2003 1 and 25A-VIII-2006 1.
8867. *Catocala blandula* Hulst (Charming Underwing) – 8-VIII-2002 1, 19-VIII-2004 1,
25B-VII-2008 1 and 30A-VIII-2009 1.
8896. *Diachrysia aeroides* (Grt.) (Dark-spotted Looper Moth) – 4A-VII-2006 1 and 4C-
VII-2006 1.
8905. *Eosphropteryx thyatyroides* (Gn.) – 25B-VII-2008 1 (Pink-patched Looper Moth
or Pink-patched Beauty) – 25B-VII-2008 1.
8914. *Autographa californica* (Speyer) (Alfalfa Looper) – 22A-VIII-2003 1, 22C-VIII-
2003 1 and 13C-IX-2003 1.
8923. *Autographa ampla* (Wlk.) (Broken-banded Y or Large Looper Moth) – 29A-VI-
2005 1.

8924. *Anagrapha falcifera* (Kby.) (Celery Looper) – 22C-VIII-2003 1, 29A-VIII-2007 1 and 9-IX-2007 1.
8926. *Syngrapha octoscripta* (Grt.) – 26-VIII-2002 1.
8929. *Syngrapha viridisigma* (Grt.) (Green-marked Looper) – 17-VIII-2002 1 CBC, 30A-VIII-2009 1 and 30B-VIII-2009 1.
8950. *Plusia putnami* Grt. (Putnam's Looper Moth) – 4A-VII-2006 1.
8953. *Plusia venusta* Wlk. (White-streaked Looper Moth) – 6-IX-2002 1 JV.
8970. *Baileya ophthalmica* (Gn.) (Eyed Bailey) – 23-V-2001 1.
9048. *Lithacodia albidula* (Gn.) (Common Midget) – 9-VII-2002 2, 29A-VI-2005 3 and 29B-VI-2005 1.
9053. *Pseudostrotia carneola* (Gn.) (Pink-barred Lithacodia) – 23-V-2001 2 and 25B-VII-2008 1.
9066. *Leuconicta lepidula* (Grt.) (Brown Leuconycta) – 19-VI-2002 1 JV.
9193. *Raphia frater* Grt. (The Brother) – 23-V-2001 2, 20-VI-2002 1, 8A-VII-2003 1, 28A-V-2004 2 (2 SR) and 4A-VII-2006 1.
9207. *Acronicta innotata* Gn. (Unmarked Dagger Moth) – 20-VI-2002 1 JV and 9-VII-2002 1.
9212. *Acronicta grisea* (Wlk.) (Gray Dagger Moth) – 30B-V-2006 1 and 30C-V-2006 1.
9226. *Acronicta superans* Gn. (The Chieftain Dagger Moth) – 23-V-2001 3, 3-VI-2002 1 and 25C-VII-2008 1.
9229. *Acronicta hasta* Gn. (The Forked Dagger Moth) – 23-V-2001 1 and 3-VI-2002 2.
9241. *Acronicta fragilis* (Gn.) (Fragile Dagger Moth) – 3-VI-2002 1, 9-VII-2002 1 and 30B-V-2006 1.
9257. *Acronicta impleta* Wlk. (Yellow-haired Dagger Moth) – 23-V-2001 2 and 3-VI-2002 1.
9261. *Acronicta impressa* (Wlk.) (Willow Dagger Moth) – 25B-VII-2008 1.
9284. *Agriopodes teratophora* (H.-S.) (The Gray Marvel) – 23-V-2001 2.
9341. *Apamea vultuosa* (Grt.) (Narrow-bordered Quaker or Airy Quaker) – 4A-VII-2006 1.
9348. *Apamea amputatrix* (Fitch) (Northern Quaker or Dusky Sallow) – 8-VIII-2002 1.
9359. *Apamea commoda* (Wlk.) (Southern Quaker) – 9-VII-2002 2, 8A-VII-2003 1, 8B-VII-2003 1, 22-VI-2004 1, 29B-VI-2005 1, 24A-VI-2006 1, 24C-VI-2006 1, 4A-VII-2006 1, 25A-VII-2008 1 and 25B-VII-2008 1.
9364. *Apamea sordens* (Hufn.) (*A. finitima* Gn.) (Bordered Apamea) – 23-V-2001 1, 9-VII-2002 1 and 30A-V-2006 1.
9365. *Apamea scoparia* (Hufn.) (*Agroperina lateritia*) (Red-winged Quaker) – 9-VII-2002 1, 4A-VII-2006 1 and 4C-VII-2006 1.
9369. *Apamea inficita* (Wlk.) (Inficita Quaker) – 26-VII-2002 2, 8-VIII-2002 2, 17-VIII-2002 1 JV, 17-VIII-2002 1 CBC, 30B-VII-2003 1 and 25A-VII-2008 1.
9374. *Apamea niveivenosa* (Grt.) (White-veined Quaker) – 9-VII-2002 1 and 17-VIII-2002 1.
9280. *Simyra henrici* (Grt.) – 23-V-2001 1.
9382. *Apamea devastator* (Brace) (Destructive Quaker or Glassy Cutworm Moth) – 9-VII-2002 1, 1-IX-2002 1 JV, 11-IX-2002 12, 8-IX-2002 1 JV, 22-VI-2004 1, 19-VIII-2004 1 and 29A-VI-2005 1.

9391. *Luperina passer* (Gn.) (Dock Rustic) – 9-VII-2002 1, 25C-VII-2008 1 and 30B-VIII-2009 1.
- 9412.1. *Oligia subjuncta* (Sm.) (Short-cloaked Quaker) – 25B-VII-2008 5 and 25C-VII-2008 1.
9419. *Oligia mactata* (Gn.) (Prairie Quaker) – 1-IX-2002 JV, 25A-VIII-2006 1 and 29A-VIII-2007 1.
9420. *Oligia illocata* (Wlk.) (Wandering Quaker) – 9-VII-2002 1, 1-IX-2002 1 JV, 11-IX-2002 1, 19-VIII-2004 2, 25A-VIII-2006 1, 25B-VIII-2006 1, 25B-VII-2008 1 and 30B-VIII-2009 1.
9431. *Parastichtis suspecta* (Wlk.) (Mottled Quaker) – 8-VIII-2002 1, 25B-VII-2008 1, 30A-VIII-2009 1 and 30B-VIII-2009 1.
9434. *Spartiniphaga includens* (Wlk.) (Silver-C Borer) – 17-VIII-2002 1 CBC, 26-VIII-2002 1, 11-IX-2002 1 and 30A-VIII-2009 1.
9440. *Chortodes rufostrigata* (Pack.) (Brown-streaked Rustic) – 26-VIII-2002 1 and 30A-VIII-2009 1.
9450. *Archanara subflava* (Grt.) (Subflava Sedge Borer) – 25A-VIII-2006 1.
9453. *Celaena reniformis* (Grt.) (Kidney-spotted Rustic) – 11-IX-2002 1, 22C-VIII-2003 1 and 25C-VII-2008 1.
9457. *Amphipoea americana* (Speyer) (American Ear Moth) – 26-VIII-2002 2, 11-IX-2002 3, 22B-VIII-2003 1, 25A-VIII-2006 1, 30A-VIII-2009 1 and 30B-VIII-2009 1. Close to *Amphipoea interoceanica* (Sm.).
9472. *Papaipema harrisii* (Grt.) (Cow Parsnip Borer Moth) - 29A-VIII-2007 1.
9515. *Hydraecia perobliqua* Hamp. (Oblique Rustic) – 26-VIII-2002 1 and 11-IX-2002 2.
9525. *Bellura obliqua* (Wlk.) (Cattail Borer Moth) – 23-V-2001 2, 28A-V-2004 2 (3 SR), 22A-VI-2004 2 (3 SR), 22B-VI-2004 1 SR and 30C-V-2006 1.
9547. *Phlogophora periculosa* Gn. (Brown Angle Shaed or Great Angle Shades) – 25B-VII-2008 1 and 25C-VII-2008 1.
9549. *Enargia decolor* (Wlk.) (Angle-striped Sallow) – 17-VIII-2002 1 JV, 17-VIII-2002 1 CBC, 24-VIII-2002 1 JV, 26-VIII-2002 2, 30-VIII-2002 1 JV, 11-IX-2002 1, 22B-VII-2003 1, 22C-VIII-2003 1, 13C-IX-2003 2, 19-VIII-2004 1, 25A-VIII-2006 1, 25B-VIII-2006 1, 9A-IX-2006 1, 9B-IX-2006 1, 29A-VIII-2007 1, 29B-VIII-2007 1, 30A-VIII-2009 1 and 30B-VIII-2009 1.
9550. *Enargia infumata* (Grt.) (Lesser Angle-striped Sallow) – 4A-VII-2006 1, 25B-VII-2008 1 and 25C-VII-2008 1.
9555. *Ipimorpha pleonectusa* Grt. (Even-lined Sallow) – 11-IX-2002 1, 9C-IX-2006 1 and 29A-VIII-2007 1.
9564. *Andropolia contacta* (Wlk.) – 8-VIII-2002 1.
9647. *Proxenus miranda* (Grt.) (Glistening Rustic) – 9-VII-2002 2, 17C-VI-2003 1, 9A-VII-2003 1, 8B-VII-2003 1, 22-VI-2004 1, 29A-VI-2005 1, 30B-V-2006 1, 4A-VII-2006 1, 4C-VII-2006 1 and 25A-VII-2008 1.
9649. *Proxenus mendosa* McD. – 26-VIII-2002 1 and 8A-VII-2003 1.
9656. *Platyperigea montana* (Bremer) (*P. extima* (Wlk.) (Civil Rustic) – 8-VIII-2002 2, 26-VIII-2002 1, 11-IX-2002 1, 17A-VI-2003 1, 9A-IX-2006 1 and 9B-IX-2006 1.
9874. *Xylena curvimacula* (Morr.) (Dot-and-Dash Swordgrass Moth) – 1-V-2002 2, 2-V-2003 1 JV, 14A-V-2003 1, 13A-IX-2003 1 and 9A-IX-2006 1.
9875. *Xylena thoracica* (Put.-Cram) (Gray Swordgrass Moth) – 1-V-2002 2

9876. *Xylena cineritia* (Grt.) (Western Swordgrass Moth) – 23-V-2001 1 and 1-V-2002 1.
9878. *Lithomoia germana* (Morr.) (American Peasant) – 9C-IX-2006 1 and 29A-VIII-2007 2.
9881. *Homoglaea hircina* Morr. (Goat Sallow) – 1-V-2002 3.
9884. *Litholomia napaea* (Morr.) (Dark Grey Peasant) – 23-V-2001 2, 1-V-2002 3, 11-IX-2002 1, 28-IX-2002 1 JV and 16-V-2003 1 JV.
9888. *Lithophane innominata* (Sm.) (Nameless Pinion) – 23-V-2001 2 and 28-IX-2002 1 JV.
9915. *Lithophane grotei* (Riley) – 1-V-2002 1.
9933. *Eupsilia vinulenta* (Grt.) (Straight-toothed Sallow) – 24-VIII-2002 1 JV.
9935. *Eupsilia tristigmata* (Grt.) (Three-spotted Sallow) – 1-V-2002 1.
9952. *Eucirroedia pampina* (Gn.) (Scalloped Sallow) – 24-VIII-2002 1 JV, 26-VIII-2002 1, 11-IX-2002 5, 22C-VIII-2003 1, 25A-VIII-2006 1 and 30A-VIII-2009 1.
9957. *Sunira bicolorago* (Gn.) (Bicolored Sallow) – 28-IX-2002 1 JV.
9960. *Sunira verberata* (Sm.) (Western Sallow) – 26-VIII-2002 1, 11-IX-2002 1 and 28-IX-2002 1 JV.
9962. *Anathix puta* (G. & R.) (Dusky or Puta Sallow) – 24-VIII-2002 1 JV, 26-VIII-2002 3, 6-IX-2002 1 JV, 11-IX-2002 2, 22B-VIII-2003 1, 19-VIII-2004 1, 9A-IX-2006 1 and 26C-VI-2007 1.
9965. *Xanthia tatago* Laf. & Mik. (*X. sp. nr togata*) (Pink-barred Sallow) – 28-VIII-2002 1 JV, 25A-VIII-2006 1, 30A-VIII-2009 1, 30B-VIII-2009 1 and 30C-VIII-2009 1. True *togata* is strictly Palearctic.
9967. *Hillia iris* (Zett.) (Iris Rover) – 25A-VIII-2006 1.
9976. *Platypolia anceps* (Steph.) (Rugged Rover) – 28-IX-2002 1 JV 13A-IX-2003 1, 13C-IX-2003 1, 9B-IX-2006 1 and 9C-IX-2006 1.
- 9987 or 9988. *Mniotype ducta* (Grt.) (Alberta Rover) or *M. tenera* (Sm.) (Miniota Rover) – 30A-V-2006 1 and 25A-VIII-2006 1.
9990. *Sutyna profunda* (Sm.) (Profound Sallow) – 11-IX-2002 1 and 25A-VIII-2006 1.
9993. *Brachylomia populi* (Stkr.) (Cloaked Peasant) – 28-IX-2002 1 JV and 9C-IX-2006 1.
9998. *Brachylomia algens* (Grt.) (Willow Peasant) – 11-IX-2002 1, 19-VIII-2004 1, 9A-IX-2006 1 and 30B-VIII-2009 1.
10011. *Brachylomia borealis* (Sm.) (Northern Sallow) – 1-V-2002 1.
10028. *Pleromelloida obliquata* (Sm.) – 14A-V-2003 1, 14B-V-2003 1, 11A-V-2007 1, 11B-V-2007 1 and 11C-V-2007 1.
10035. *Noctua pronuba* (B. & McD.) (Large Yellow Underwing) – 25B-VII-2008 1 and 30B-VIII-2009 1.
10059. *Homohadena basistriga* (Grt.) (Brown-lined Sallow) – 9-VII-2002 1.
10062. *Homohadena stabilis* Sm. – 30B-VII-2003 2, 4A-VII-2006 1 and 4C-VII-2006 2.
10065. *Homohadena infixa* (Wlk.) (Broad-lined Sallow) – 9-VII-2002 2, 30A-VII-2003 1 and 25B-VII-2008 1.
10124. *Oncocnemis cibalis* Grt. (Delicate Beauty) – 9A-IX-2006 1.
10140. *Oncocnemis poliochroa* Hamp. – 13A-IX-2003 1.
10143. *Oncocnemis mackiei* (B. & Benj.) (Mackie's Beauty) – 11-IX-2002 8, 25A-VIII-2006 1 and 9C-IX-2006 1.
10198. *Cucullia postera* Gn. – 17A-VI-2003 1.

10223. *Discestra trifolii* (Hufn.) – 27-V-2004 1.
10224. *Discestra mutata* (Dod) – 17C-VI-2003 1.
10232. *Discestra farnhami* (Grt.) (Farnham's *Discestra*) – 23-V-2001 3, 12-VI-2002 3, 12-VI-2003 3, 28B-V-2004 2 (5 SR) and 30C-V-2006 1.
10265. *Sideridis rosea* (Harv.) (Rosy Penman) – 23-V-2001 1, 12-VI-2002 1 and 27-V-2004 1.
10271. *Mamestra configurata* (Wlk.) (Bertha Armyworm) – 25C-VII-2008 1
10275. *Polia nimbosa* (Gn.) – 22-VI-2004 1 and 29B-VI-2005 1.
10276. *Polia imbrifera* (Gn.) (Cloudy Arches) – 29A-VI-2005 1, 4A-VII-2006 1 and 4B-VII-2006 1.
10280. *Polia purpurissata* (Grt.) (Purple Arches) – 9-VII-2002 1, 8-VIII-2002 3, 17-VIII-2002 1 CBC, 26-VIII-2002 1, 8A-VII-2003 1, 30B-VII-2003 1, 30C-VII-2003 1, 19-VIII-2004 1, 25A-VII-2008 1, 25B-VII-2008 1 and 25C-VII-2008 1..
10288. *Polia detracta* (Wlk.) (Disparaged Arches) – 3-VI-2002 1, 9-VII-2002 1, 22-VI-2004 2 and 29A-VI-2005 3.
10289. *Polia goodelli* (Grt.) (Goodell's Arches) – 30B-V-2006 1.
10290. *Polia obscura* (Sm.) (Obscure Arches) – 23-V-2002 1 and 30B-V-2006 1.
10295. *Melanchra assimilis* (Morr.) (Black Arches) – 29B-VI-2005 1 and 4C-VII-2006 1.
10297. *Lacanobia atlantica* (Grt.) (Atlantic Arches) – 23-V-2001 2 and 9-VII-2002 2.
10298. *Lacanobia radix* (Wlk.) (Garden Arches) – 12-VI-2002 1, 22-VI-2004 2, 30B-V-2006 1 and 30C-V-2006 1.
10305. *Trichordestra dodii* (Sm.) – 9-VII-2002 1.
10307. *Trichordestra lilacina* (Harv.) (Lilac Arches) – 4A-VII-2006 1.
10308. *Trichordestra liquida* (Grt.) (Liquid Arches) – 12-VI-2002 1.
10312. *Papestra cristifera* (Wlk.) – prob. 17C-VI-2003 1.
10368. *Lacinipolia meditata* (Grt.) (The Thinker or Pink-backed Cutworm Moth) – 8-VIII-2002 2, 30B-VII-2003 1, 30C-VII-2003 1, 25A-VII-2008 2, 25B-VII-2008 1 and 25C-VII-2008 1.
10370. *Lacinipolia lustralis* (Grt.) (Lustrous Arches) – 8B-VII-2003 1, 22-VI-2004 2, 29B-VI-2005 1 and 4A-VII-2006 1.
10372. *Lacinipolia anguina* (Grt.) (Snaky Arches) – 27-V-2004 1 and 30C-V-2006 2.
10397. *Lacinipolia renigera* (Steph.) (Kidney-spotted Arches or Bristly Cutworm Moth) – 9-VII-2002 1, 8-VIII-2002 1, 30B-VII-2003 1, 4A-VII-2006 1, 4C-VII-2006 1, 25A-VII-2008 1, 25B-VII-2008 1, 25C-VII-2008 1 and 30A-VIII-2009 1.
10405. *Lacinipolia lorea* (Gn.) (Bridled Arches) – 9-VII-2002 1, 8-VIII-2002 1, 8A-VII-2003 1 and 4A-VII-2006 1.
10406. *Lacinipolia olivacea* (Morr.) (Olive Arches) – 8-VIII-2002 1, 11-IX-2002 1 and 25C-VII-2008 1.
10431. *Faronta diffusa* (Wlk.) (Cloudy Wainscot or Wheat-head Armyworm Moth) – 23-V-2001 2, 9-VII-2002 1, 17B-VI-2003 1 and 30C-V-2006 1.
10436. *Aletia oxygala* (Grt.) (Lesser Wainscot) – 8-VIII-2002 2, 26-VIII-2002 1, 19-VIII-2004 1, 4B-VII-2006 1, 25A-VII-2008 1 and 25C-VII-2008 1.
10446. *Leucania multilinea* Wlk. – 8-VIII-2002 1 and 4B-VII-2006 1.
10447. *Leucania commoides* Gn. – 30B-VII-2003 1, 4A-VII-2006 1, 4C-VII-2006 1, 25B-VII-2008 1 and 25C-VII-2008 1.
10449. *Leucania insueta* Gn. (Heterodox Wainscot) – 9-VII-2002 1 and 22-VI-2004 1.

10471. *Stretchia plusiaeformis* Hy. Edw. (Grey Spectacles) – 1-V-2002 2, 17-V-2003 1 JV and 11B-V-2007 1.
10490. *Orthosia revicta* (Morr.) (Subdued Quaker) – 23-V-2001 1, 1-V-2002 5, 11A-V-2007 3 and 11-C-V-2007 1.
10493. *Orthosia segregata* (Sm.) (Segregate Penman) – 23-V-2001 1, 3-VI-2002 1, 14A-V-2003 1, 24-V-2003 1 JV, 11B-V-2007 1 and 11C-V-2007 1.
10493. *Orthosia segregata* f. *negussa* Sm. – 23-V-2001 1, 3-V-2003 1 JV and 14A-V-2003 1.
10495. *Orthosia hibisci* (Gn.) (Variable Penman) – 1-V-2002 4, 27-V-2004 2, 11A-V-2007 1 and 11C-V-2007 2.
10513. *Egira dolosa* (Grt.) (Greater Black-letter Dart) – 14A-V-2003 2.
10524. *Nephelodes minians* Gn. (Shaded Umber or Brown Cutworm Moth) – 24-VIII-2002 1 JV, 26-VIII-2002 13-VIII-2002 1 JV, 1-IX-2002 1 JV, 22B-VIII-2003 1, 19-VIII-2004 1, 25A-VIII-2006 1, 25B-VIII-2006 1, 25C-VIII-2006 1 and 29C-VIII-2007 1.
10530. *Anhimela contrahens* (Wlk.) – 19-VIII-2004 1.
10563. *Protorthodes oviduca* (Gn.) (Ruddy Quaker) – 23-V-2001 3, 3-VI-2002 1, 12-VI-2002 2, 17A-VI-2003 1, 28A-V-2004 7 SR, 22A-VI-2004 1 (2 SR), 22B-VI-2004 2 SR and 30A-V-2006 1.
10641. *Agrotis vetusta* Wlk. (Old Man Dart) – 19-VIII-2004 1.
10645. *Agrotis orthogonia* Morr. – 22B-VIII-2003 2 and 22C-VIII-2003 1.
10651. *Agrotis venerabilis* Wlk. (Venerable Dart) – 10-VI-2002 1 JV, 12-VI-2002 1, 26-VIII-2002 2, 11-IX-2002 1, 22C-VIII-2003 1, 25B-VIII-2006 1, 25C-VIII-2006 1, 29A-VIII-2007 2, 30A-VIII-2009 1, 30B-VIII-2009 1 and 30C-VIII-2009 1.
10652. *Agrotis vancouverensis* Grt. (Vancouver Dart) – 23-V-2001 1, 12-VI-2002 1, 9-VII-2002 1, 22B-VI-2004 2 4SR, 30A-V-2006 1 and 30B-V-2006 1.
10658. *Agrotis stigmata* Morr. – 23-V-2001 1.
10660. *Agrotis obliqua* (Sm.) (Oblique Dart) – 23-V-2002 1, 12-VI-2002 1, 9-VII-2002 1 and 22B-VI-2004 2 (4 SR).
10670. *Feltia jaculifera* (Gn.) (Dingy Cutworm Moth) – 8-VIII-2002 1, 26-VIII-2002 1, 19-VIII-2004 1, 25A-VII-2008 1, 25B-VII-2008 1 and 25C-VII-2008 1.
10676. *Feltia herilis* (Grt.) (Master's Dart) – 26-VIII-2002 1, 11-IX-2002 2 and 30B-VII-2003 1.
- 10701.1. *Euxoa adumbrata* (Ev.) (Sordid Dart) – 25B-VII-2008 1 and 25C-VII-2008 1.
- 10701.2. *Euxoa auxiliaris* (Grt.) – 11-IX-2002 1, 13A-IX-2003 1, 22-VI-2004 1, 29A-VIII-2007 1 and 29B-VIII-2007 1.
10702. *Euxoa divergens* (Wlk.) (Divergent Dart) – 9-VII-2002 2, 8A-VII-2003 1, 8B-VII-2003 1, 22-VI-2004 1 and 25C-VII-2009 1.
10705. *Euxoa messoria* (Harr.) – 22C-VIII-2003 1.
10723. *Euxoa tristicula* (Morr.) (Three-marked Dart) – 9-VII-2002 2, 8A-VII-2003 1, 30B-VII-2003 1, 22-VI-2004 2, 30C-V-2006 1, 4A-VII-2006 1, 25B-VII-2008 1 and 25C-VII-2008 1.
10731. *Euxoa auxiliaris* (Grt.) (Auxiliary Dart) – 8-VIII-2002 2, 26-VIII-2002 2. Listed in LTA as 10701.2 *Euxoa auxiliaris* (Grt.). The life history, appearance, food hosts and damage are described and illustrated in Philip (no date).
10738. *Euxoa mimallonis* (Grt.) (Ruddy Dart) – 8B-VII-2003 1.

10755. *Euxoa declarata* (Wlk.) (Clear Dart) – 11-IX-2002 2 and 22B-VIII-2003 1.
10756. *Euxoa campestris* (Grt.) (Flat Dart) – 17-VIII-2002 1 JV, 26-VIII-2002 1 and 25C-VII-2008 3.
10780. *Euxoa comosa* (Morr.) (Hairy Dart) – 26-VIII-2002 1 and 22B-VIII-2003 1.
10794. *Euxoa setonia* McD. (Seton Lake Dart) – 19-VIII-2004 1.
10798. *Euxoa basalis* (Grt.) (Pale-based Dart) – 8-VIII-2002 2.
10801. *Euxoa ochrogaster* (Gn.) (Red-backed Cutworm Moth) – 26-VIII-2001 1, 8-VIII-2002 1, 17-VIII-2002 1 CBC, 21-VIII-2002 1, 26-VIII-2002 1, 11-IX-2002 1, 30C-VII-2003 1, 13C-IX-2003 1, 19-VIII-2004 1, 25C-VII-2008 1, 30A-VIII-2009 1 and 30B-VIII-2009 1.
10805. *Euxoa tessellata* (Harr.) (Tessellate Dart) – 11-IX-2002 1.
10807. *Euxoa albipennis* (Grt.) (White-winged Dart) – 11-IX-2002 1.
- 10852/4. *Euxoa auripennis* Lafontaine or *Euxoa servita* (Sm.) (Servita Dart) – 11-IX-2002 1 JV.
10854. *Euxoa servita* (Sm.) (Servita Dart) – 30B-VII-2003 1.
10861. *Euxoa ridingsiana* (Grt.) (Riding's Dart) – 8-VIII-2002 2, 26-VIII-2002 2, 30C-VII-2003 1 and 30B-VIII-2009 1.
10891. *Ochroleura implecta* (Laf.) (Flame-shouldered Dart) – 9-VII-2002 1.
10910. *Anicla tepperi* (Sm.) (*Euagrotis tepperi*) (Black-girdled Dart) – 9-VII-2002 1, 11-IX-2002 1, 22B-VIII-2003 1, 22-VI-2004 1 and 4A-VII-2006 1.
10917. *Diarsia rubifera* (Grt.) (Rubifera Dart) – 8-VIII-2002 1, 11-IX-2002 2 and 25B-VII-2008 1.
10923. *Actebia balanitis* (Grt.) (Acorn or Bracketed Dart) – 9-VII-2002 1 and 22B-VIII-2003 1.
10926. *Spaelotis clandestina* (Harr.) (Clandestine Dart) – 9-VII-2002 1, 8B-VII-2003 2 and 4A-VII-2006 1.
10928. *Graphiphora augur* (Grt.) (Soothsayer Dart) – 29A-VI-2005 1, 25B-VII-2008 2 and 25C-VII-2008 1.
10929. *Eurois occulta* (L.) (Great Grey Dart) – 11-IX-2002 1, 9B-IX-2006 1, 29A-VIII-2007 1, 25C-VII-2008 1, 30A-VIII-2009 1 and 30B-VIII-2009 1.
10930. *Eurois astricta* Morr. (Great Brown Dart) – 9-VII-2002 2, 8-VIII-2002 1, 30-VIII-2002 1 JV, 30B-VII-2003 1, 4A-VII-2006 2, 4B-VII-2006 1, 4C-VII-2006 1, 25A-VII-2008 1, 25B-VII-2008 1 and 25C-VII-2008 1.
10942. *Xestia c-nigrum* (Franc.) (Black-letter Dart) – 9A-IX-2006 1, 25B-VII-2008 1 and 25C-VII-2008 1 and 30B-VIII-2009 1.
10943. *Xestia normaniana* (Grt.) (Norman's Dart) – 25B-VII-2008 1.
10944. *Xestia smithii* (Snell) (Smith's or Spotted Clay Dart) – 8-VIII-2002 3, 17-VIII-2002 1 JV, 26-VIII-2002 3, 30C-VII-2003 2, 19-VIII-2004 1, 25A-VIII-2006 1, 25A-VII-2008 1, 25B-VII-2008 1 and 25C-VII-2008 1.
10947. *Xestia oblata* (Morr.) (Rosy or Ruby Dart) – 9-VII-2002 1.
10951. *Pseudohermonasa tenuicula* (Morr.) (Hair-pin Dart) – 25B-VII-2008 1.
10954. *Agnorisma bugrai* (Koçak) (*Xestia collaris* (G. & R.)) (Collared Dart) – 8-VIII-2002 1, 17-VIII-2002 1 CBC, 26-VIII-2002 4, 11-IX-2002 2, 22B-VIII-2003 1, 22C-VIII-2003 1, 19-VIII-2004 2, 25A-VIII-2006 1, 9A-IX-2006 1, 29B-VIII-2007 1, 29C-VIII-2007 1, 30A-VIII-2009 1 and 30C-VIII-2009 1.

10992. *Paradiarsia littoralis* (Pack.) (Labrador Dart) – 9-VII-2002 2, 8A-VII-2003 1, 22A-VI-2004 2 (4 SR), 22B-VI-2004 8 SR and 29A-VI-2005 1, 4A-VII-2006 1, 4B-VII-2006 1 and 4C-VII-2006 1.
10996. *Cerastis salicarum* (Wlk.) (Willow Dart) - 11B-V-2007 1.
11000. *Anaplectoides prasina* (D. & S.) (Green-winged Dart) – 25B-VII-2008 1.
11001. *Anaplectoides pressus* (Grt.) – 9-VII-2002 1 and 25B-VII-2008 1.
11004. *Protolampra rufipectus* (Morr.) (Red-breasted Dart) – 8-VIII-2002 3 and 26-VIII-2002 1, 25B-VII-2008 2, 25C-VII-2008 1 and 30A-VIII-2009 1.
11012. *Cryptocala acadensis* (Bethune) (Catocaline Dart) – 4A-VII-2006 1 and 25C-VII-2008 2.
- 11041.1. *Abagrotis hermina* Lafontaine – 8-VIII-2002 1, 26-VIII-2002 3, 11-IX-2002 1 and 19-VIII-2004 1.
11175. *Schinia meadi* (Grt.) – 17A-VI-2003 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 (BK) is most similar (56.38%) to the Buffalo Lake Conservation Area (BL), (56.34%) to AH and (52.41%) to the Lowden Springs site (LS). It was least similar (32.54%) to the aspen woods of the Lohr Farm site (LF). More habitats in Big Knife Provincial Park are similar to those of BL, and thus many similar food plants are present. Conversely, LF has far fewer habitats, and thus fewer food plants, than BK.

SUMMARY

A total of 78 species were reported for Big Knife Provincial Park in the report for 2001 (Bird 2002). The 2002 report (Bird 2003), which added the 2002 findings to those of 2001 plus those of Vincent (2002), brought the total up to 330, (Bird 2004) had 360, (Bird 2005) had 445, Bird (2006) had 462, Bird (2007) had 517, Bird (2008) had 539, while 549 are reported herein. If all species in the undetermined categories were named, the total would be over 600. The actual total of species that might be expected would be around 700. To put things into perspective, Pohl et al (2010) document 2367 species of Lepidoptera for Alberta. The present report is still “a work in progress”. Attempts should be made in the future to sample new habitats, for example the *Opuntia fragilis* community beside the river near the western boundary of the Park.

It was especially gratifying that one of the species collected in 2002, *Semioscopis merricella*, turned out to be new for Alberta (Pohl et al. 2005) while *Phaneta ornatula*, collected in 2008, also turned out to be new for the province. *Sparganothis flavibasana*, collected in 2009, was also new for the province. It is exciting that Dr. Don Wright feels that two species of *Eucosma* collected in the Park may be new to science. A number of species, such as *Sphinx luscitiosa*, *Sphinx drupiferarum* and *Leptostales ferruminaria* have been seldom encountered in the province

Of the 14 major areas involved in the present study, fifteen species of moths were found only BK – *Nites grotella* (Rob.), *Battaristis concinuse* (Cham.), *Phaneta*

ornatula (Heinr.), *Sparganothis flavibasana* (Fern.), *Cochylis nana* (Haw.), *Aethes heleniana?*, *Loxostege lepidalis* (Hulst), *Dioryctria pseudotsugella* Mun., *Paraplatyptilia albiciliata* (Wlsm.), *Emmelina monodactyla* (L.), *Eupithecia albicapitata* Pack., *Schizura ipomeae* Doubleday, *Lithophane grotei* (Riley), *Brachylomia borealis* (Sm.) and *Cucullia postera* Gn.

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Even though others have helped, I personally take responsibility for the identification of the species mentioned in this report. 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. Wayne Nordstrom and Gerry Bennett are thanked for their help in obtaining Letters of Authority to allow the collecting of Lepidoptera in Big Knife Provincial Park. It was always a pleasure to be associated with Seasonal Conservation Officers Jodi Vincent, Abigail Knight, Amanda Rode, Michael Merrills and April Nelson.

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USEFUL ONLINE INFORMATION SOURCES ON MOTHS

Information on, and illustrations of, many of our Alberta moths can be found at the Entomology Collection Search site of the E.H. Strickland Entomological Museum of the Department of Biological Sciences at the University of Alberta:

<http://www.entomology.ualberta.ca/>.

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.

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

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

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

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Plate I. Some moths from Big Knife Provincial Park



Acentria ephemerella, wingspan 14 mm: ALBERTA, Big Knife Provincial Park, 11-IX-2002, C.D. Bird, BIRD45, C.D. Bird image



wingspan 19 mm
Acrobasis tricolorella
9-VII-2002, Big Knife Prov. Park, AB, C.D. Bird



wingspan 28 mm
Ambesa laetella
9-VII-2002, Big Knife Prov. Park, AB, C.D. Bird



Ancylys mediafasciana, wingspan 18 mm: ALBERTA, Big Knife Provincial Park, 23-V-2001, C.D. Bird, BIRD743, C.D. Bird image



wingspan 14 mm
Argyrotaenia quadrifasciana
26-VIII-2002, Big Knife Prov. Park, AB, C.D. Bird



wingspan 17 mm
Coleophora trifolii
9-VII-2002, Big Knife, Prov. Park, AB, C.D. Bird



Dioryctria pseudotsugella, wingspan 22 mm: ALBERTA, Big Knife Provincial Park, C.D. Bird, BIRD222, C.D. Bird image



wingspan 28 mm
Petrova burkeana
11-VII-2001, 8 km NW Winfield, AB, C.D. Bird

APPENDIX
Collection dates, sites and other details

- 23 May 2001 – 1 UV trap set up in mixed woods, another in aspen/silverwillow, 52.49, 112.22, 675 m.
- 30 September 2001 – diurnal, Buffalo Lake Naturalist's hike, 52.49, 112.22, 675 m.
- 1 May 2002 – UV and MV, 52.49, 112.22, 675 m.
- 3 June 2002 – UV and MV, 52.49, 112.22, 675 m.
- 12 June 2002 – UV, 52.49, 112.22, 675 m.
- 9 July 2002 – UV, 52.49, 112.22, 675 m.
- 8 August 2002 – UV, 52.49, 112.22, 675 m.
- 11 September 2002 – UV and MV, 52.49, 112.22, 675 m
- 15 September 2002 – Diurnal, Buffalo Lake Naturalist's hike, 52.49, 112.22, 675 m.
- 14A May 2003 – UV and MV, mixed woods, campground, 52.494, 112.222, 675 m.
- 14B May 2003 – UV, meadow, near boat launch, 52.492, 112.211, 660 m.
- 17A June 2003 – UV, meadow with aspen/buckbrush nearby, close to start of upper hiking trail, 52.486, 112.206, 683 m.
- 17B June 2003 – UV, mixed grass clearing surrounded by aspen/chokecherry/saskatoon, half way up hill from start of upper hiking trail, 52.486, 112.206, 692 m.
- 17C June 2003 – MV, aspen/chokecherry/saskatoon, campground, 52.493, 112.220, 686 m.
- 8A July 2003 – UV, meadow with aspen/buckbrush nearby, close to start of upper hiking trail, 52.486, 112.206, 683 m.
- 8B July 2003 – UV, mixed grass clearing surrounded by aspen/chokecherry/saskatoon, half way up hill from start of upper hiking trail, 52.486, 112.206, 692 m.
- 30A July 2003 – MV, aspen/chokecherry/saskatoon, campground, 52.493, 112.220, 686 m.
- 30B July 2003 – UV, meadow with aspen/buckbrush nearby, close to start of upper hiking trail, 52.486, 112.206, 683 m.
- 30C July 2003 – UV, meadow, near boat launch, 52.492, 112.211, 660 m.
- 22A August 2003 – MV, aspen/chokecherry/saskatoon, campground, 52.493, 112.220, 686 m.
- 22B August 2003 – UV, meadow with aspen/buckbrush nearby, close to start of upper hiking trail, 52.486, 112.206, 683 m.
- 22C August 2003 – UV, meadow, near boat launch, 52.492, 112.211, 660 m.
- 13A September 2003 – UV, meadow with aspen/buckbrush nearby, close to start of upper hiking trail, 52.486, 112.206, 683 m.
- 13B September 2003 – UV, meadow, near boat launch, 52.492, 112.211, 660 m.
- 13C September 2003 – MV, mixed woods, campground, 52.494, 112.222, 675 m.
- 28A May 2004 – UV, aspen/buckbrush/silverwillow, trail to woodpile, 52.492, 112.213, 681 m.
- 28B May 2004 – UV, aspen/buckbrush/fescue prairie, upper hiking trail, 52.487, 112.205, 698 m.
- 28C May 2004 – MV, aspen/white spruce/chokecherry/pin cherry, east of Park Office, 52.488, 112.216, 711 m.

- 22A June 2004 – UV, aspen/buckbrush/fescue prairie, upper hiking trail, 52.487, 112.205, 698 m.
- 22B June 2004 – UV, aspen/buckbrush/silverwillow, trail to woodpile, 52.492, 112.213, 681 m.
- 22D June 2004 – Diurnal, Lowlands Trail, 52.49, 112.23, 680 m.
- 19A August 2004 – UV, aspen/buckbrush/fescue prairie, base of upper hiking trail, 52.487, 112.205, 698 m.
- 19B August 2004 – UV, *Picea glauca*/*Populus tremuloides*, maintenance area west of Park Office, 52.487, 112.217, 708 m.
- 29A June 2005 – UV, *Picea glauca*/*Populus tremuloides*, maintenance area west of Park Office, 52.487, 112.217, 708 m.
- 29B June 2005 – UV, aspen/buckbrush/fescue prairie, base of upper hiking trail, 52.487, 112.205, 698 m.
- 30A May 2006 – UV, aspen/buckbrush/silverwillow, trail to woodpile, 52.492, 112.213, 681 m.
- 30B May 2006 – UV, *Picea glauca*/*Populus tremuloides*, maintenance area west of Park Office, 52.487, 112.217, 708 m.
- 30C May 2006 – UV, meadow with aspen/buckbrush/silverwillow/chokecherry, 1 km E of Park Office, 52.487, 112.208, 712 m.
- 4A July 2006 – UV, aspen/buckbrush/silverwillow, trail to woodpile, 52.492, 112.213, 681 m.
- 4B July 2006 – UV, *Picea glauca*/*Populus tremuloides*, maintenance area west of Park Office, 52.487, 112.217, 708 m.
- 4C July 2006 – UV, aspen/buckbrush/fescue prairie, base of upper hiking trail, 52.487, 112.205, 698 m.
- 25A August 2006 – UV, aspen/buckbrush/silverwillow, trail to woodpile, 52.492, 112.213, 681 m.
- 25B August 2006 – UV, *Picea glauca*/*Populus tremuloides*, maintenance area west of Park Office, 52.487, 112.217, 708 m.
- 25C August 2006 – UV, meadow with aspen/buckbrush/silverwillow/chokecherry, 1 km E of Park Office, 52.487, 112.208, 712 m.
- 9A September 2006 – UV, aspen/buckbrush/silverwillow, trail to woodpile, 52.492, 112.213, 681 m.
- 9B September 2006 – UV, *Picea glauca*/*Populus tremuloides*, maintenance area west of Park Office, 52.487, 112.217, 708 m.
- 9C September 2006 – UV, meadow with aspen/buckbrush/silverwillow/chokecherry, 1 km E of Park Office, 52.487, 112.208, 712 m.
- 11A May 2007 – UV, meadow near chokecherry and aspen, near boat launch, 52.492, 112.211, 660 m.
- 11B May 2007 – UV, *Picea glauca*/*Populus tremuloides*, maintenance area west of Park Office, 52.487, 112.217, 708 m.
- 11C May 2007 – UV, meadow with aspen/buckbrush/silverwillow/chokecherry, 1 km E of Park Office, 52.487, 112.208, 712 m.
- 29A August 2007 – UV, N-facing slope, *Picea glauca* woods, west of Park Office, 52.487, 112.217, 730 m.

- 29B August 2007 – UV, *Picea glauca*/*Populus tremuloides*, maintenance area west of Park Office, 52.487, 112.217, 708 m.
- 29C August 2007 – UV, meadow with aspen/buckbrush/silverwillow/chokecherry, 1 km E of Park Office, 52.487, 112.208, 712 m.
- 25A July 2008 – UV, meadow with aspen/buckbrush/silverwillow/chokecherry, at base of upper trail. 1 km E of Park Office. 52.487. -112.208, 712 m.
- 25B July 2008 – UV, N-facing slope, *Picea glauca* woods, west of Park Office, 52.487, -112.217, 730 m.
- 25C July 2008 – UV, *Picea glauca*/*Populus tremuloides* woods, maintenance area west of Park Office, 52.487, -112.217, 708 m.
- 30A August 2009 – UV, N-facing slope, *Picea glauca* woods, west of Park Office, 52.487, -112.217, 730 m.
- 30B August 2009 – UV, N-facing slope, *Picea glauca*/*Populus tremuloides* woods, close to Park Office, 52.487, -112.213, 710 m.
- 30C August 2009 – UV, meadow with aspen/buckbrush/silverwillow/chokecherry,, 1 km E of Park Office, base of upper trail, 52.487, -112.208, 712 m.
- 13 September 2009 – diurnal, lower hiking trail, Buffalo Lake Naturalists/Camrose Outdoor Club hike with Conservation Officer Ashley Patterson, 52.493, 112.23, 690 m.