

LEPIDOPTERA OF BIG KNIFE PROVINCIAL PARK, 2001-2006

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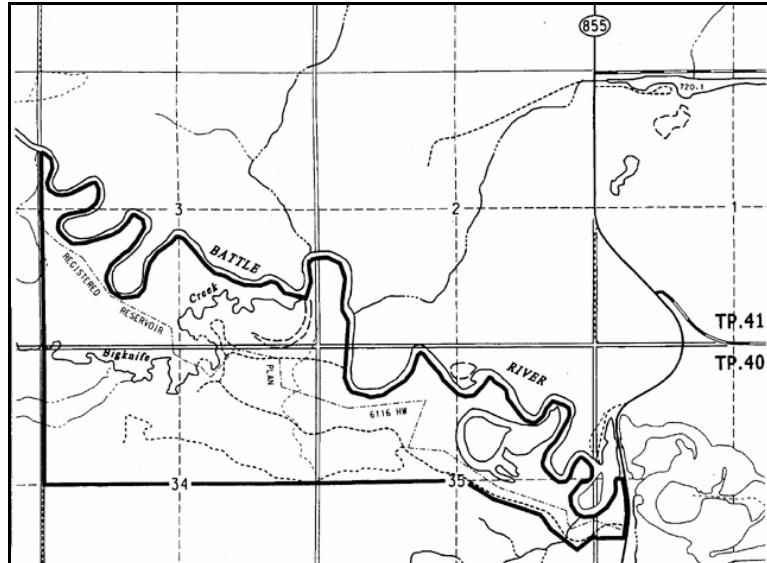


Buffalo Lake Naturalist's 15 September 2002 field trip in Big Knife Provincial Park, Jodi Vincent and Charles Bird kneeling; Ann Bird, Mary Muhlbach, Wayne Kinsella, Nora and Hugh Charles, Lorreen and John Beggs in the back.

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) 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. The present report incorporates the information in all of the studies from 2001 to 2006. It also includes a number of redeterminations of material mentioned in the earlier 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. All collections were made by Bird. 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.

The present report incorporates all of the findings in the reports of studies in the years 2001, 2002 and 2004 (Bird 2002, 2003, 2004). It also includes a number of corrections to identifications in the previous reports.

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.
- 29. *Gazorycta noviganna* (B. & Benj.) (Ghost Moth) – 1-IX-2002 1 JV, 22A-VIII-2003 1 and 9C-IX-2006 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 and 4C-VII-2006 1.
- 421. *Monopis spilotella* Tengström – 19-VIII-2004 1.

GRACILLARIIDAE – Gracillariid Moths

- 583-644. *Caloptilia* sp. – 23-V-2001 1.
 594.1. *Caloptilia betulivora* McD. – 23-V-2001 1, 1-V-2002 1 and 19-VIII-2004 1.
 Sp. nr. 595. *Caloptilia bimaculatella* (Ely) – 17A-VI-2003 1.
 669. *Parornix conspicuella* (Dietz) – 17A-VI-2003 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 5 and 14A-V-2003 1.
 916. *Semioscopis aurorella* Dyar – 1-V-2002 2.
 922. *Depressaria pastinacella* (Dup.) – 14A-V-2003 1.

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.

COLEOPHORIDAE – Coleophorid Moths

- 1254-1389. *Coleophora* spp. – 9-VII-2002 1, 8-VIII-2002 3, 26-VIII-2002 2, 17A-VI-2003 1, 30A-VII-2003 3, 30B-VII-2003 3, 22C-VIII-2003 1, 19-VIII-2004 8, 29A-VI-2005 5, 4B-VII-2006 2 and 4C-VII-2006 2. 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 and 8A-VII-2003 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 and 4B-VII-2006 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 and 4A-VII-2006 1. Little is known about many of the species in this family and it may be many years before some of these specimens are determined or described.

1796. Coleotechnites blastovora McLeod – 23-V-2001 5, 14A-V-2003 6 and 22-VI-2004 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.
 1946. Gelechia lynceela Zell. – 8B-VII-2003 1 and 22-VI-2004 1.
 1985. Gnorimoschema gallaeasterella (Kellcott) – 19-VIII-2004 2.
 1986. Gnorimoschema gallaesolidaginis (Riley) – 9C-IX-2006 1.
 2000. Gnorimoschema septentrionella Fyles – 19-VIII-2004 7.
 2040. Caryocolum cassella (Wlk.) – 8-VIII-2002 1. Reported as new for Alberta in Pohl et al (2005).
 Gnorimoschema sp. – 30C-VII-2003 1.
 2069. Gnorimoschema vastificum Braun – 22B-VIII-2003 1.
 2071.1. Chionodes landryi Hodges – 8A-VII-2003 1.
 2093. Chionodes mediofuscella (Clem.) – 23-V-2001 2, 1-VI-2002 1, 3-VI-2002 1, 12-VI-2002 1, 17A-VI-2003 7, 17B-VI-2003 1, 17C-VI-2003 6, 27-V-2004 8, 22-VI-2004 1, 19-VIII-2004 1 and 30A-V-2006 2.
 2099. Chionodes obscuruscella (Cham.) – 19-VIII-2004 1.
 2111. Chionodes psilopterus (B. & Bsk.) – 8A-VII-2003 1, 27-V-2004 3, 29A-VI-2005 1, 4B-VII-2006 1 and 4C-VII-2006 2.
 2117. Chionodes terminimaculella (Kft.) – 23-V-2001 3, 3-VI-2002, 27-V-2004 1 and 30C-V-2006 1.
 2127. Filatima abactella (Clarke) – 12-V-2002 3, 3-VI-2002 4, 17A-VI-2003 6, 17C-VI-2003 1, 8B-VII-2003 2, 28A-V-2004 14 SR, 28B-V-2004 9 SR, 30B-V-2006 1 and 30C-V-2006 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.

ALUCITIDAE – Many Plume Moths

- 2313.1. *Alucita montana* Barnes & Lindsay – 19-VIII-2004 2. 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 and 19-VIII-2004 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 5, 30A-VII-2003 1,
30C-VII-2003 2, 22C-VIII-2003 2, 13A-IX-2003 1, 13B-IX-2003 1, 19-VIII-2004 2 and 9B-IX-2006 1.
2371. *Ypsolopha canariella* (Wlsm.) – 30B-VII-2003 1, 22C-VIII-2003 1, 19-VIII-2004 2 and 9C-IX-2006 1.
2376. *Ypsolopha dentiferella* (Wlsm.) – 8-VIII-2002 1 and 30B-VII-2003 1.
2380. *Ypsolopha falciferella* (Wlsm.) – 1-V-2002 3 and 14A-V-2003 1.

ARGYRESTHIIDAE – Argyresthiid Moths

2474. *Argyresthia pygmaeella* (Hbn.) – 19-VIII-2004 1.

COSSIDAE – Carpenterworm Moths

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

TORTRICIDAE – Tortricid Moths

- Species unknown – 23-V-2001 1.
2743a. *Endothenia nubilana* (Clem.) – 4C-VII-2006 1.
2753. *Apotomis capreana* (Hbn.) (Sallow Apotomis Moth) – 4A-VII-2006 1.
2766. *Apotomis dextrana* McD. (Green Aspen Leafroller Moth) – 8-VIII-2002 1 and 22C-VIII-2003 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 4, 17C-VI-2003 4, 8A-VII-2003 1, 8B-VII-2003 2, 22-VI-2004 21, 29A-VI-2005 2, 29B-VI-2005 1 and 4C-VII-2006 1.
- Olethreutes* spp. – 9-VII-2002 2, 8-VIII-2002 6, 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 difficult to identify and 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 and 29A-VI-2005 2.
2900. *Petrova burkeana* (Kft.) – 15-VIII-2002 1 JV.
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.
2933. *Phaneta marmontana* (Kft.) – 30A-VII-2003 1, 4B-VII-2006 1 and 4C-VII-2006 1.
2940. *Phaneta convergana* (McD.) – 23-V-2001 1 and 23-V-2003 1 JV.
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 and 4C-VII-2006 3.
3005. *Phaneta effectalis* (Hulst) – 9-VII-2002 1.
- Eucosma* sp. – 29A-VI-2005 1.
- Eucosma* n. sp. 1 – 17-VI-2003 1. In the last report as 3156 *Pelochrista occipitana*, this specimen is felt to be an undescribed species by Dr. Don Wright.
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.
3116. *Eucosma dorsisignatana* (Clem.) – 26-VIII-2002 2, 11-IX-2002 6 and 19-VIII-2004 1.
3119. *Eucosma juncticiliiana* (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 and 19-VIII-2004 2.
3223. *Gypsonoma fasciolana* (Clem.) – 12-VI-2002 1.

3227. *Gypsonoma substitutionis* Heinr. – 9-VII-2002 1.
3248. *Pseudexentera oregonana* (Wlsm.) (Early Aspen Leafroller Moth) – 1-V-2002 2.
3283. *Epinotia solandriana* (L.) (Codling Moth) – 19-VIII-2004 1.
3288. *Epinota 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 and 19-VIII-2004 1.
3307. *Epinotia criddleana* Kft. – 8-VIII-2002 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 and 9B-IX-2006 2.
3355. *Ancylis subaequana* (Zell.) – 17C-VI-2003 2 and 30A-V-2006 1.
3374. *Ancylis comptana* (Frölich) (Strawberry Leafroller Moth) – 9-VII-2002 1.
3382. *Ancylis unguicella* (L.) – 23-V-2001 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. *Hystrichophora 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 and 4C-VII-2006 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 many 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 and 19-VIII-2004 1.
3525. *Acleris forbesana* (McD.) – 23-V-2001 3, 30C-V-2006 1 and 9B-IX-2006 1.
3531. *Acleris hastiana* (L.) – 14B-V-2003 1.
3536. *Acleris robinsoniana* (Fbs.) – 22C-VIII-2003 2.
3548. *Acleris variana* (Fern.) (Black-headed Budworm Moth) – 22A-VIII-2003 1 and 9B-IX-2006 3.
3549. *Acleris maccana* (Tr.) – 1-V-2002 1.
3552. *Acleris scabrina* (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 and 30C-V-2006 1.
3589. *Anopina wellingtoniana* Kft. – 9C-IX-2006 1.
3595. *Pandemis canadana* Kft. (Green Aspen Leaftier Moth) – 9-VII-2002 1, 17-VIII-2002 1 JV, 19-VIII-2004 1, 4A-VII-2006 1, 4B-VII-2006 2 and 4C-VII-2006 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 and 4C-VII-2006 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 argyrosila* (Wlk.) (Fruit-tree Leafroller Moth) – 4A-VII-2006 2, 4B-VII-2006 4 and 4C-VII-2006 1.
3675. *Aphelia alleniana* (Fern.) – 9-VII-2002 1 and 8B-VII-2003 1.
3682. *Clepsis persicana* (Fitch) (White-triangle Tortrix Moth) – 29A-VI-2005 1, 4A-VII-2006 1 and 4B-VII-2006 1.
3684. *Clepsis clemensiana* (Fern.) (Clemen's Clepsis 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 and 4C-VII-2006 2.
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 and 4C-VII-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 and 4C-VII-2006 2.
3720. *Sparganothis reticulatana* (Clem.) (Reticulated Fruitworm Moth) – 11-IX-2002 1.
3740. *Platynota idaeusalis* (Wlk.) (Tufted Apple Bud Moth) – 8-VIII-2002 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 and 4A-VII-2006 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.
 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.
 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.
 4599. *Erebia epiphron* 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 biplagialis* Wlk. (Double-striped Scoparia Moth) – 8-VIII-2002 1, 26-VIII-2002 5, 11-IX-2002 3 and 30A-VII-2003 1 and 4A-VII-2006 1.
 4755. *Synclita obliteralis* (Wlk.) (Waterlily Leafcutter Moth) – 26-VIII-2002 1.

4897. *Evergestis pallidata* (Hufn.) (Purple-backed Cabbageworm Moth) – 4A-VII-2006 1.
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 and 17C-VI-2003 1.
4974. *Achyra bifidalis* (F.) – 9-VII-2002 1.
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 and 4C-VII-2006 1.
5032. *Pyrausta nicalis* (Grt.) – 8A-VII-2003 1.
5068. *Pyrausta unifascialis* (Pack.) – 8B-VII-2003 1 and 22-VI-2004 1.
5074. *Pyrausta fodinalis* (Led.) – 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, 4A-VII-2006 2, 4C-VII-2006 1 and 9C-IX-2006 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.
5276. *Herpetogramma abdominalis* (Zell.) – 22B-VIII-2003 1.
5299. *Acentria ephemerella* (Olivier) – 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 and 22C-VIII-2003 2. 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.
5319. *Donacaula longirostrella* (Clem.) – 4A-VII-2006 1.
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 and 4C-VII-2006 1.
5352. *Crambus trichusalis* Hulst – 22C-VIII-2003 1.
- 5354-5357. *Crambus ainsliellus* Klots or *leachellus* (Zinck.) – 26-VIII-2002 1, 11-IX-2002 1 and 19-VIII-2004 2. Dissection of the male genitalia is necessary to distinguish between these two species which superficially look alike and which fly at the same time.
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 and 4B-VII-2006 1.
5397. *Agriphila plumbifimbriella* (Dyar) – 8-VIII-2002 1, 26-VIII-2002 1, 30A-VII-2003 1, 30C-VII-2003 1 and 19-VIII-2004 1. The forewings lack the AM and PM lines usually associated with *A. ruricolella*. Some specimens have the ST lines usually

associated with *A. plumbifimbriella*, though this line, if present, is faint. Most fresh specimens have a distinct yellowish-orange shade in the terminal area in which the seven black dots are found. *Agriphila ruricolella* lacks this feature. *Agriphila ruricolella* is basically an eastern species while *A. plumbifimbriella* is western. There are no known genitalic differences between the two species. Thus, taking everything into account, this material fits *plumbifimbriella* better than *ruricolella*. It is possible that *plumbifimbriella* should be regarded as a synonym of *ruricolella*.

- 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*.
- 5411. *Pediasia truncatella* (Zett.) – 22-VI-2004 1.
- 5413. *Pediasia trisecta* (Wlk.) (Sod Webworm Moth) – 26-VIII-2002 1, 11-IX-2002 3, 22A-VIII-2003 3, 22B-VIII-2003 4, 22C-VIII-2003 5, 19-VIII-2004 1 and 25C-VIII-2006 1.
- 5415. *Pediasia ericella* (B. & McD.) – 9-VII-2002 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 and 19-VIII-2004 2.
- 5441a. *Thaumatopsis fernaldella nortella* Kft. – 26-VIII-2002 1 and 4A-VII-2006 1.
- 5474. *Acigona comptulatilis* (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 and 4A-VII-2006 3.
- 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 and 30C-V-2006 1.
- 5721. *Apomyelois bistriatella* (Hulst) – 4B-VII-2006 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. *Nephopterix 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.
- 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.
- 5946. *Phycitoides mucidellum* (Rag.) – 25B-VIII-2006 1.
- 5968. *Zophodia grossulariella* (Hbn.) (Gooseberry Fruitworm Moth) – 3-VI-2002 1, 14A-V-2003 1 and 27-V-2004 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.
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.
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 and 25C-VIII-2006 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.
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 and 29A-VI-2005 1.
6431. *Hesperumia sulphuraria* Pack. (Sulphur Moth) – 4A-VII-2006 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.
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 erythema* 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 and 4C-VII-2006 1.
6678. *Cabera variolaria* Gn. (Pale Striped Willow Spanworm) – 9-VI-2002 1 JV, 9-VII-2002 2 and 29A-VI-2005 2.
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 and 4C-VII-2006 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 and 4B-VII-2006 1.
6743. *Xanthotype sospeta* (Drury) (Crocus Geometer) – 28-VIII-2002 1 JV, 8A-VII-2003 1, 29A-VI-2005 1, 4A-VII-2006 1 and 4B-VII-2006 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 and 4B-VII-2006 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 and 13C-IX-2003 1.

6817. *Selenia alciphearia* Wlk. (Northern Selenia) – 23-V-2001 1, 29-VI-2002 1 JV and 24-V-2003 1 JV.
6818. *Selenia kentaria* (G. & R.) (Kent's Geometer) – 23-V-2001 1 and 30B-V-2006 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. *Probola 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. *Probola amicaria* (H.-S.) (Friendly Probola) – 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 and 4B-VII-2006 1.
6954. *Synaxis jubataria* (Hulst) (October Thorn) – 28-IX-2002 1 JV, 9A-IX-2006 1, 9B-IX-2006 1 and 9C-IX-2006 1.
6963. *Tetricis 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 and 9A-IX-2006 1.
7009. *Nematocampa resistaria* (H.-S.) (Horned Spanworm Moth) – 24-VII-2002 1 JV.
7018. *Nemoria unitaria* (Pack.) – 14-VI-2002 1 JV and 9-VII-2002 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 limbounata* (Haw.) (Large Lace-border) – 9-VII-2002 3.
7162. *Scopula ancillata* (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 and PC-IX-2006 2.
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.
7187. *Dysstroma truncata* (Hufn.) (Marbled Carpet) – 17-VIII-2002 1 CBC and 24-VIII-2002 1 JV.
7201. *Eulithis testata* (L.) (Chevron Moth) – 30-VIII-2002 1 JV and 1-IX-2002 1 JV.
7206. *Eulithis explanata* (Wlk.) (White Eulithis) – 8-VIII-2002 1.
7207. *Eulithis xylinea* (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.
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.
7369. *Xanthorhoe packardata* McD. – 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 and 9C-IX-2006 1.
7414. *Orthonama obstipata* (F.) – 10-VI-2002 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 and 23-V-2003 2 JV.
7639. *Cladara atroliturata* (Wlk.) (The Scribbler) – 14A-V-2003 1 and 17-V-2003 1 JV.
7640. *Lobophora nivigerata* 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 and 30B-V-2006 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 and 29-VI-2002 1 JV.
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 and 4A-VII-2006 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 and 4B-VII-2006 1.
7922. *Pheosia rimosa* Pack. (Black-rimmed Prominent) – 9-VII-2002 1, 30A-V-2006 1, 30B-V-2006 1, 30C-V-2006 1 and 4A-VII-2006 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.
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 and 4B-VII-2006 1.
 8011. *Schizura leptinoides* (Grt.) (Black-blotched Schizura) – 22-VI-2002 1 JV.
 8012. *Oligocentria semirufescens* (Wlk.) (Red-washed Prominent) – 4A-VII-2006 1 and 4B-VII-2006 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 and 19-VIII-2004 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 and 19-VIII-2004 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.
 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 and 4C-VII-2006 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.
 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 and 30C-VII-2006 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 and 4C-VII-2006 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. *Cisseps 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 and 4A-VII-2006 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 and 9B-IX-2006 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 and 9B-IX-2006 1.
8413. *Mycterocephora inexplicata* (Wlk.) (Pale-edged Snout-moth) – 17-VIII-2002 1 CBC.
8421. *Hypenodes fractilinea* (Sm.) (Broken-line Hypenodes) – 8B-VII-2003 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 cuspidea* (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.
8803. *Catocala relicta* 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.
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 and 19-VIII-2004 1.
8896. *Diachrysia aeroides* (Grt.) (Dark-spotted Looper Moth) – 4A-VII-2006 1 and 4C-VII-2006 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.
8926. *Syngrapha octoscripta* (Grt.) – 26-VIII-2002 1.
8929. *Syngrapha viridisigma* (Grt.) (Green-marked Looper) – 17-VIII-2002 1 CBC.
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 Baileya) – 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.
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 and 3-VI-2002 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.
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 and 4A-VII-2006 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 and 30B-VII-2003 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.
9419. *Oligia mactata* (Gn.) (Prairie Quaker) – 1-IX-2002 JV and 25A-VIII-2006 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 and 25B-VIII-2006 1.
9431. *Parastichtis suspecta* (Wlk.) (Mottled Quaker) – 8-VIII-2002 1.
9434. *Spartiniphaga includens* (Wlk.) (Silver-C Borer) – 17-VIII-2002 1 CBC, 26-VIII-2002 1 and 11-IX-2002 1.
9440. *Chortodes rufostrigata* (Pack.) (Brown-streaked Rustic) – 26-VIII-2002 1.
9450. *Archanaara subflava* (Grt.) (Subflava Sedge Borer) – 25A-VIII-2006 1.
9453. *Celaena reniformis* (Grt.) (Kidney-spotted Rustic) – 11-IX-2002 1 and 22C-VIII-2003 1.

9457. *Amphipoea americana* (Speyer) (American Ear Moth) – 26-VIII-2002 2, 11-IX-2002 3, 22B-VIII-2003 1 and 25A-VIII-2006 1. Close to *Amphipoea interoceanica* (Sm.).
9515. *Hydraecia perobla* 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.
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 and 9B-IX-2006 1.
9550. *Enargia infumata* (Grt.) (Lesser Angle-striped Sallow) – 4A-VII-2006 1.
9555. *Ipmorpha pleonectusa* Grt. (Even-lined Sallow) – 11-IX-2002 1 and 9C-IX-2006 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 and 4C-VII-2006 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.
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 and 25A-VIII-2006 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 and 9A-IX-2006 1.
9965. *Xanthia tatago* Laf. & Mik. (X. sp. nr togata) (Pink-barred Sallow) – 28-VIII-2002 1 JV and 25A-VIII-2006 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 and 9A-IX-2006 1.
10011. *Brachylomia borealis* (Sm.) (Northern Sallow) – 1-V-2002 1.
10028. *Pleromelloida obliquata* (Sm.) – 14A-V-2003 1 and 14B-V-2003 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 and 30A-VII-2003 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.
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 and 19-VIII-2004 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 and 30C-VII-2003 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 and 4C-VII-2006 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 and 11-IX-2002 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 and 4B-VII-2006 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 and 4C-VII-2006 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 and 17-V-2003 1 JV.
10490. *Orthosia revicta* (Morr.) (Subdued Quaker) – 23-V-2001 1 and 1-V-2002 5.
10493. *Orthosia segregata* (Sm.) (Segregate Penman) – 23-V-2001 1, 3-VI-2002 1, 14A-V-2003 1 and 24-V-2003 1 JV.
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 and 27-V-2004 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 and 25C-VIII-2006 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 and 25C-VIII-2006 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 stigmosa* 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 and 19-VIII-2004 1.
10676. *Feltia herilis* (Grt.) (Master's Dart) – 26-VIII-2002 1, 11-IX-2002 2 and 30B-VII-2003 1.
- 10701.2. *Euxoa auxiliaris* (Grt.) – 11-IX-2002 1, 13A-IX-2003 1 and 22-VI-2004 1.

10702. *Euxoa divergens* (Wlk.) (Divergent Dart) – 9-VII-2002 2, 8A-VII-2003 1, 8B-VII-2003 1 and 22-VI-2004 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 and 4A-VII-2006 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 and 26-VIII-2002 1.
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 and 19-VIII-2004 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 and 30C-VII-2003 1.
10891. *Ochropleura 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 and 11-IX-2002 2.
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.
10929. *Eurois occulta* (L.) (Great Grey Dart) – 11-IX-2002 1 and 9B-IX-2006 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 and 4C-VII-2006 1.
10942. *Xestia c-nigrum* (Franc.) (Black-letter Dart) – 9A-IX-2006 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 and 25A-VIII-2006 1.
10947. *Xestia oblata* (Morr.) (Rosy or Ruby Dart) – 9-VII-2002 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 and 9A-IX-2006 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.
11001. *Anaplectoides pressus* (Grt.) – 9-VII-2002 1.
11004. *Protolampra rufipectus* (Morr.) (Red-breasted Dart) – 8-VIII-2002 3 and 26-VIII-2002 1.
11012. *Cryptocala acadiensis* (Bethune) (Catocaline Dart) – 4A-VII-2006 1.
- 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.

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. The third report (Bird 2004), which added the 2003 collections to the others, brought the total up to 360 species. The next report (Bird 2005) brought the total up to 445 species. The present report lists 462 species. Many of these were not recorded for Area 8 by Bowman (1951). The actual total of species that might be expected is well over 600, so it is obvious that further research will add considerably to the total. The present report is still “a work in progress”. Many more species can still be added, a few of the present reports will be found to be misidentified, and there are still species in the “unknown” category which will eventually be determined or described. 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, while a number of other species, such as *Sphinx luscitiosa*, have been seldom encountered in the province. Further rare species showed up in the 2004 research, including *Sphinx drupiferarum*. In 2005, it was exciting to discover a species of *Eucosma* which Dr. Don Wright feels is new to science. There is every reason to believe that more new things will be found in the area.

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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

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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



Ancylis mediofasciana, 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.