

LEPIDOPTERA OF THE TOLMAN BRIDGE AREA, ALBERTA, 2000-2008

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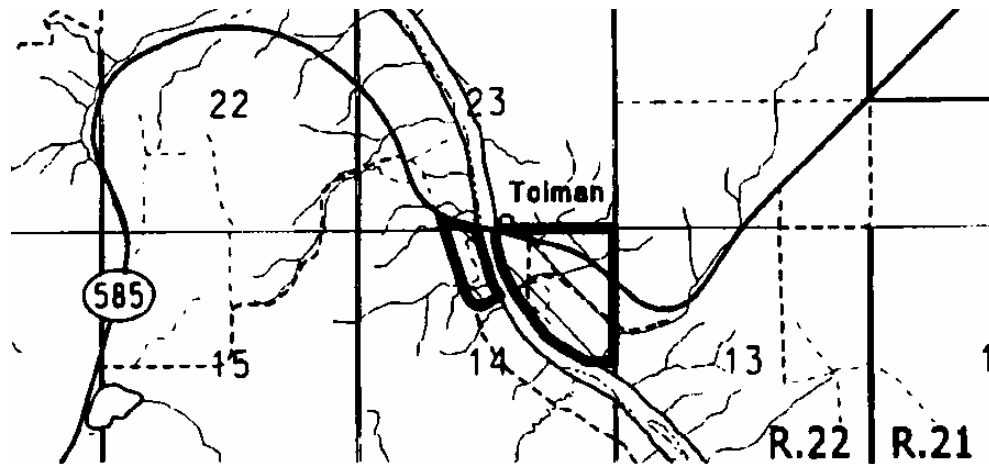
The present paper includes a number of redeterminations and additions to the information in earlier reports.



Brian Scholtens, Greg Pohl and Jean-François Landry collecting moths at a sheet illuminated by a mercury vapor (MV) light, Tolman Bridge, 24 July 2003, during the 2003 Olds meetings of the Lepidopterist's Society (C.D. Bird image).

Tolman Bridge, is located in the valley of the Red Deer River, 18 km (10 miles) east of the town of Trochu. The bridge and adjoining Park land are in the north half of section 14, range 22, township 34, west of the Fourth Meridian. The coordinates at the bridge are 51.503N and 113.009W. The elevation ranges from around 600 m at the river to 800 m or so near the top of the river breaks. In a Natural Area Inspection Report dated 25 June 1982 and in the 1989 Trochu 82 P/14, 1:50,000 topographic map, the land southwest of the bridge was designated as the "Tolman Bridge Municipal Park" while that southeast of the bridge was referred to as the "Tolman Bridge Recreation Area". In an Alberta, Department of the Environment, Parks and Protected Areas Division paper

dated 9 May 2000, the areas on both sides of the river are included in “Dry Island Buffalo Jump Provincial Park”. Campgrounds are found in both areas and they are patrolled by a Conservation Officer stationed in Drumheller.



Map showing land owned by the Province of Alberta on the east and west sides of the Red Deer River, being connected by Tolman Bridge.

Ecologically, the Tolman Bridge area is located in the “Tolman Badlands” and is between the Northern Fescue Subregion of the Grassland Natural Region and the Central Subregion of the Parkland Natural Region. A riverine community with balsam poplar, willows, chokecherry and various shrubs is found close to the river. The river flats have a mixture of *Koeleria cristata* and *Agropyron-Stipa* grasslands along with *Artemisia cana* in depositional areas. The Fragile Prickly Pear cactus, *Opuntia fragilis*, is common in the flats. A number of steep-sided ravines run through the flats and connect the riverine communities with those of the river breaks. North-facing exposures of the breaks have a dense growth of aspen, saskatoon, rose and juniper. South-facing slopes have a grassland community with *Bouteloua gracilis* and *Koeleria cristata* being common.

The varied terrain and numerous habitats allow the presence of numerous species of plants, insects, birds and mammals. The area has, therefore been a popular place, not only for campers, picnickers, fishermen and photographers, but also for birders, those interested in various insect groups, and naturalists in general.

A 2003 report by Bird and Mengersen brought together much of what had been learned about the Lepidoptera (moths and butterflies) of the area up to the end of 2002. Reports by Bird (2004 and 2005) added information gathered in 2003 and 2004. The present report incorporates all of the information found in the earlier ones, corrects some identifications found in the earlier reports, and adds information from recently identified unknowns from previous years. Additional species may have been collected or observed by others and it is hoped that some of this information will surface and can be added to a future report. This report is still very much a “work in progress”. Future work will result in the addition of further species through collecting and through identifications of undetermined species in difficult and poorly known groups. Also, some identifications may still need to be revised.

A Letter of Authority to allow the collecting of specimens in the Tolman Bridge area was issued to cover the years 2001, 2002, 2003 and 2004. The following personal

collections were made in the area: 2000 – May 19, May 21, June 22, September 13; 2002 – August 9, August 24, September 6; 2003 – July 23, July 24, August 24; 2005 – May 4.

Because of its species richness and good camping facilities, Tolman Bridge has long been a “hot spot” for entomologists to visit.



Entomologists Gary Anweiler, Dave Lawrie, Chris Schmidt and Ernest Mengersen on an outing to Tolman Bridge, May 18, 2000 (C.D. Bird image).

CHECKLIST

The order and terminology is that of R.W. Hodges (1983) except where recent changes in taxonomy have occurred. Kenneth Bowman's (1951) list of the Lepidoptera of Alberta presented all species known up to that time. That list recorded the known distribution of the various species. Numerous species were recorded in some areas, such as Edmonton, but other areas, such as the one that included Tolman Bridge had few species. The present report, and work being done in neighbouring areas, will help fill in that gap.

Species are followed by collection dates arranged in chronological order. The majority of moths were collected at night, theoretically over a two day period. Initials of the collectors are as follows: GGA = Gary Anweiler, CDB = Charles Bird, BL = Bernard Landry, DL = Dave Lawrie, DM = Doug Macaulay, EM = Ernest Mengersen, EMP = Ted Pike, GP = Greg Pohl, BCS = Chris Schmidt, BS = Brian Scholtens, FS = Felix Sperling, and AW = Andrew Warren et al. An SR abbreviation refers to a sight record or release. The abbreviations BCSC, BIRD, GGAC, OLDS, POHL and UASM refer to specimens being housed in the Schmidt, Bird, Gary Anweiler, OLDS, Pohl and Strickland Museum collections.

TINEIDAE – Clothes Moths and others

334. *Amydria effrentella* Clem. – 9-VIII-2002 2 CDB BIRD and 24-VIII-2002 3 CDB BIRD.

399. *Tinea irrepta* Braun – 3-VII-2002 1 CDB BIRD and 24B-VII-2003 1 CDB BIRD.

GRACILLARIIDAE – Gracilariid Moths

798. *Phyllonorycter* prob. *tremuloidella* (Braun) – 9-V-2000 1 CDB BIRD. *Now called P. apparella* (H.-S.).

OECOPHORIDAE – Oecophorid Moths

918. *Depressaria atrostrigella* Clarke – 24A-VIII-2003 1 CDB, BIRD and 24B-VIII-2003 1 CDB, BIRD.

922. *Depressaria pastinacella* (Dup.) – 24B-VIII-2003 1 CDB BIRD.

SYMMOCIDAE – Symmocid Moths

1138.1 *Glyphidocera hurlberti* Adamski – 27A-VI-2003 1.

BLASTOBASIDAE – Blastobasid Moths

Species unknown – 24-VIII-2002 1 CDB BIRD.

Hypatopa sp. – 23/24-VII-2003 BL.

COLEOPHORIDAE – Casebearer Moths

1254-1398. *Coleophora* spp. – 22-VI-2001 1 CDB BIRD, 9-VIII-2002 1 CDB BIRD and 24-VIII-2002 2 CDB BIRD. 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.

1388. *Coleophora trifolii* (Curt.) – 8/9-VII-2001 2 EM BIRD, 9-VIII-2002 1 CDB BIRD, 23/24-VII-2003 BL.

1515. *Lymnaecia phragmitella* Staint. – 9-VIII-2002 1 CDB BIRD.

COSMOPTERIGIDAE – Cosmopterygid Moths

1615. *Walshia miscecolorella* (Cham.) – 4/5-VI-2000 1 EM OLDS, 3/4-VII-2000 1 EM OLDS, 23/24-VI-2002 1 EM OLDS and 23/24-VII-2003 BL.

GELECHIIDAE – Gelechiid Moths

1681-2311. Species unknown – 9-VIII-2002 7 CDB BIRD, 24-VIII-2002 1 CDB BIRD and 4B-V-2005 2 CDB BIRD. 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.
1762. *Aristotelia rubidella* (Clem.) – 24-VIII-2002 1 CDB BIRD.
1796. *Coleotechnites blastovora* McLeod – 4A-V-2005 5 CDB BIRD and 4B-V-2005 4 CDB BIRD.
1902. *Lita variabilis* (Bsk.) – 24-VIII-2002 2 CDB BIRD and 24B-VIII-2003 2 CDB BIRD.
2127. *Filatima abactella* (Clarke) – 22-VI-2000 1 CDB BIRD.
- Aroga* sp. nr. *paraplutella* – 23/24-VII-2003 BL. This is an undescribed species according to Dr. Jean-François Landry.
2243. *Anacampsis niveopulvella* (Cham.) – 24A-VIII-2003 1 CDB BIRD.
2267. *Helcystogramma fernaldella* (Bsk.) – 19-V-2000 1 CDB BIRD.

ALUCITIDAE – Many-plume Moths

2313. *Alucita adriendenisi* B. Landry & J.-F. Landry – 13/14-VI-2002 1 EM OLDS and 9-VIII-2002 1 CDB BIRD. Bernard Landry and Jean-François Landry (2004) have shown that true *hexadactyla* does not occur in North America and that three other species occur in Alberta.

PLUTELLIDAE – Plutellid Moths

2366. *Plutella xylostella* (L.) – 23/24-VIII-2001 1 EM BIRD, 24A-VIII-2003 1 CDB BIRD, 4A-V-2005 1 CDB BIRD and 4B-V-2005 1 CDB BIRD.
2371. *Ypsolopha canariella* (Wlsm.) – 24-VIII-2002 1 CDB BIRD and 11-VIII-2004 1 GGA UASM.
2376. *Ypsolopha dentiferella* (Wlsm.) – 9-VIII-2002 1 CDB BIRD.
2380. *Ypsolopha falciferella* (Wlsm.) – 4B-V-2005 1 CDB BIRD.

SESIIDAE – Wasp Moths

2543. *Sesia tibialis* (Harr.) – 11-VIII-2004 1 GGA UASM.
2572. *Synanthedon proxima* (Hy. Edw.) – 1-VII-2001 4 (pheromone trap) GGA BIRD.

COSSIDAE – Carpenterworm Moths

2676. *Acosus populi* (Wlk.) (Aspen Carpenterworm) – 23/24-VIII-1999 1 EM OLDS, 8/9-VII-2001 1 EM OLDS and 4-VIII-2001 1 GGA UASM.

TORTRICIDAE – Tortricid or Bell Moths

2706. *Bactra furfurana* (Haw.) – 23/24-VIII-2001 1 EM OLDS.
2743. *Endothenia nubilana* (Clem.) – 9-VIII-2002 1.
2769. *Pseudosciaphila duplex* (Wlsm.) (Spotted Aspen Leafroller) – 3-VII-2000 1 EM OLDS.

2770. *Orthotaenia undulana* (D. & S.) (Dusky Leafroller) – 22-VI-2000 1 CDB BIRD, 22-VI-2000 1 EM OLDS, 3-VII-2000 1 EM OLDS and 3-VII-2001 1 EM OLDS.
- Olethreutes* spp. – 12/13-VI-2000 1 EM OLDS, 22-VI-2000 2 CDB BIRD, 6/7-VI-2001 1 EM OLDS, 13/14-VI-2002 1 EM OLDS and 9-VIII-2002 3 CDB BIRD.
2859. *Olethreutes cespitana* (Hbn.) – 23/24-VII-2003 BL.
2861. *Hedya ochroleucana* (Frölich) – 3/4-VII-2000 1 EM OLDS and 3/4-VII-2001 1 EM OLDS.
2862. *Hedya nubiferana* (Haw.) – 9-VIII-2002 1 and 24B-VII-2003 1.
- Phaneta* sp. – 23/24-VII-2003 BL.
2956. *Phaneta tarandana* (Mösch.) – 11/12-VIII-2004 1 GGA UASM.
2966. *Phaneta crassana* (McD.) – 19-V-2000 1 CDB BIRD.
2985. *Phaneta infimbriana* (Dyar) – 24-VIII-2002 1 CDB BIRD.
2986. *Phaneta octopunctana* (Wlsm.) – 8/9-VII-2001 2 EM BIRD.
- Eucosma* sp. – 9-VIII-2002 2 CDB BIRD.
- Eucosma* n. sp. 2 – 24B-VIII-2003 1 CDB BIRD. This is an undescribed species according to Dr. Don Wright.
3031. *Eucosma serpentana* (Wlsm.) – 9-VIII-2002 7 CDB BIRD, 24-VIII-2002 2 CDB BIRD, 23-VII-2003 1 CDB BIRD and 23/24-VII-2003 BL.
3037. *Eucosma agricolana* (Wlsm.) – 19-V-2001 1 CDB BIRD.
3116. *Eucosma dorsisignatana* (Clem.) – 20/21-VIII-2001 1 EM OLDS and 23/24-VIII-2001 1 EM OLDS.
3142. *Eucosma cataclystana* (Wlk.) – 9-VIII-2002 1 CDB BIRD.
- 3151a. *Pelochrista scintillana* (Clem.) – 3/4-VII-2000 1 EM OLDS.
3173. *Epiblema abruptana* (Kft.) – 23/24-VII-2003? BL.
3223. *Gypsonoma fasciolana* (Clem.) – 9-VIII-2002 1 CDB BIRD.
3306. *Epinotia nisella* Cl. – 24B-VII-2003 6 CDB BIRD and 24A-VIII-2003 2 CDB BIRD.
3306. *Epinotia nisella* Cl. form – 24-VII-2003 1 CDB BIRD.
3307. *Epinotia criddleana* Kft. – 23/24-VI-2002 1 EM OLDS.
3342. *Epinotia lomonana* (Kft.) – 23/24-VIII-2001 1 EM OLDS.
3351. *Epinotia lindana* (Fern.) – 16/17-IX-2000 1 EM OLDS, 24A-VIII-2003 4 CDB BIRD and 24B-VIII-2003 1 CDB BIRD.
3382. *Ancylis unguicella* (L.) – 13/14-VI-2002 1 EM OLDS.
3391. *Hystrichophora stygiana* (Dyar) – 9-VIII-2002 1 CDB BIRD.
3502. *Croesia albicomana* (Clem.) – 3/4-VII-2000 1 EM OLDS and 8/9-VII-2001 3 EM BIRD.
3521. *Acleris semiannula* (Rob.) – 24B-VIII-2003 1? CDB BIRD.
3536. *Acleris robinsoniana* (Fbs.) – 24A-VIII-2003 2 CDB BIRD.
3561. *Acleris hudsoniana* (Wlk.) complex – 4B-V-2005 1 CDB BIRD.
3580. *Decodes hororianus* (Wlsm.) – 6-IX-2002 1 CDB BIRD.
3595. *Pandemis canadana* Kft. (Green Aspen Leaf-tier) – 24B-VII-2003 1 CDB BIRD and 23/24-VII-2003 BL.
3638. *Choristoneura fumiferana* (Clem.) (Spruce Budworm) – 23/24-VII-2003 BL.
3648. *Archips argyrospila* (Wlk.) (Fruit Tree Leafroller) – 3/4-VII-2000 1 EM OLDS.
3675. *Aphelia alleniana* (Fern.) – 3/4-VII-2000 1 EM OLDS.
3682. *Clepsis persicana* (Fitch) (White Triangle Tortrix) – 22-VI-2000 1 CDB BIRD.

3684. *Clepsia clemensiana* (Fern.) – 15/16-VIII-1999 1 EM OLDS and 22-VI-2000 1 CDB BIRD.
 3688. *Ptycholoma peritana* (Clem.) (Garden Tortrix) – 24B-VII-2003 1 CDB BIRD.
 3695. *Sparganothis sulfureana* (Clem.) – 3/4-VIII-2000 1 EM OLDS.
 3711. *Sparganothis unifasciana* (Clem.) – 3/4-VII-2000 1 EM BIRD.
 3712. *Sparganothis vocaridorsana* Kft. – 12/13-VI-2000 1 EM OLDS and 22-VI-2000 1 CDB BIRD.
 3720. *Sparganothis reticulatana* (Clem.) – 24B-VII-2003 2 CDB BIRD.

COCHYLIDAE – Cochylid Moths

3796. *Phtheochroa waracana* (Kft.) – 9-VIII-2002 1 CDB BIRD.

HESPERIIDAE - Skippers

3945. *Erynnis icelus* (Scud. & Burg.) (Dreamy Duskywing) – 4-V-2004 BCS.
 3960. *Erynnis afranius* (Lint.) (Afranius Duskywing) – 27-VII-2003 AW and 11-VIII-2004 1 GGA UASM.
 3961. *Erynnis persius* (Scudder) (Persius Duskywing) – 21-V-2000 CDB BIRD.
 3966. *Pyrgus communis* (Grt.) (Checkered Skipper) – 12-VI-1999 EMP, 22-VI-2000 CDB BIRD, 1-VII-2001 BCS BCSC and 27-VII-2003 AW.
 4007. *Oarisma garita* (Reak.) (Garita Skipper) – 22-VI-2000 CDB BIRD.
 4020b. *Hesperia comma assiniboia* (Lyman) – 27-VII-2003 AW and 11-VIII-2004 5 GGA UASM.
 4041. *Polites themistocles* (Latr.) (Tawny-edged Skipper) – 27-VII-2003 AW.
 4043. *Polites mystic* (Edw.) (Long Dash Skipper) – 27-VII-2003 AW.

PAPILIONIDAE - Swallowtails

- 4165a. *Papilio machaon dodi* McD. (was *P. oregonius dodi*) (Old World or Artemisia Swallowtail) – 12-VI-1999 EMP, 1-VII-2001 BCS BCSC, 27-VII-2003 AW and 13-VIII-2004 1 GGA UASM. Felix Sperling collected 4, 5th instar larvae at Tolman Bridge on *Artemisia dracunculus* on 30 July 1981; and 1-3rd, 4-4th, and 20-5th instar larvae on 3 Sept 1982. Resulting adults were scored electrophoretically and morphometrically, and used in the Tolman Bridge 1981+1982 sample as part of Figure 15 (p. 237) of Sperling (1987).
 4167. *Papilio zelicaon* Lucas (Anise Swallowtail) – 1-VII-2001 BCS BCSC.
 4176a. *Papilio glaucus canadensis* R. & J. (Canadian Tiger Swallowtail) – 12-VI-1999 EMP.

PIERIDAE – Whites and Sulphurs

4194. *Pontia occidentalis* Reak. (Western Checkered White) – 1-VII-2001 BCS BCSC, 27-VII-2003 AW and 4-V-2004 BCS.
 4197. *Pieris rapae* (L.) (Cabbage Butterfly) – 27-VII-2003 AW and 4-V-2003 BCS.

4209. *Colias philodice* Godt. (Clouded Sulphur) – 3-IX-1982 sight record FS, 21-V-2000 CDB BIRD, 27-VII-2003 AW and 4-V-2004 BCS.
 4211. *Colias alexandra* Edw. (Alexandra Sulphur) – 27-VII-2003 AW.
 4211e. *Colias christina* Edw. (Christina Sulphur) – 27-VII-2003 AW.

LYCAENIDAE – Blues and Coppers

- 4253a. *Lycaena dione* (Scud.) (Great Gray Copper) – 27-VII-2003 AW.
 4256. *Lycaena hyllus* (Cram.) (Bronze Copper) – 27-VII-2003 AW.
 4262. *Lycaena helloides* (Bdv.) (Purplish Copper) – 27-VII-2003 AW.
 4363. *Celastrina ladon* (Cram.) (Spring Azure) – 1-V-2004 1 GP POHL.
 4275. *Harkenclenus titus* (F.) (Coral Hairstreak) – 27-VII-2003 AW.
 4285. *Satyrium liparops* (LeConte) (Striped Hairstreak) – 1-VII-2001 BCS BCSC and 27-VII-2003 AW.
 4322. *Incisalia augustinus* (Westwood) (Brown Elfin) – 4-V-2004 BCS.
 4363. *Celastrina ladon* (Cram.) (Spring Azure) – 4-V-2003 BCS.
 4372a. *Glaucopsyche lygdamus couperi* Grt. (Silvery Blue) – 12-VI-1999 EMP and 27-VII-2003 AW.
 4375. *Lycaeides melissa* (Edw.) (Melissa Blue) – 3-IX-1982 sight record FS, 12-VI-1999 EMP, 22-VI-2000 CDB BIRD, 1-VII-2001 BCS BCSC, 27-VII-2003 AW and 11-VIII-2004 1 GGA UASM.
 4376. *Plebejus saepiolus* (Bdv.) – 22-VI-2000 CDB BIRD.
 4379. *Plebejus shasta* (Edw.) (Shasta Blue) – 1-VII-2001 BCS BCSC.
 4380. *Plebejus acmon* (Westwood & Hewitson) (Acmon Blue) – 1-VII-2001 BCS BCSC.
 4384d. *Plebejus rusticus* (Edw.) (Rustic Blue) – 13-VI-1999 EMP and 21-VI-2000 CDB BIRD.

NYMPHALIDAE - Fritillaries

4422. *Polygonia satyrus* (Edw.) (Satyr Anglewing) – 10-IV-1999 EMP.
 4433. *Aglais milberti* (Godt.) (Milbert's Tortoiseshell) – 1-VII-2002 BCS BCSC and 27-VII-2003 AW.
 4435. *Vanessa cardui* (L.) (Painted Lady) – 1-VII-2001 BCS BCSC.
 4447. *Euptoieta claudia* (Cram.) (Variegated Fritillary) - 3-IX-1982 copulating pair FS, 1-VII-2001 BCS and 27-VII-2003 AW.
 4450. *Speyeria cybele* (Fabr.) (Great Spangled Fritillary) – 1-VII-2001 BCS BCSC and 27-VII-2003 AW.
 4451. *Speyeria aphrodite* (F.) (Aphrodite Fritillary) – 27-VII-2003 AW.
 4465b. *Boloria bellona jenistai* Stallings & Turner (Meadow Fritillary) – 21-V-2000 CDB BIRD.
 4481. *Phyciodes tharos* (Drury) (Pearl Crescent) – 12-VI-1999 EMP, 21-V-2000 CDB BIRD and 27-VII-2003 AW.
 4481. *Phyciodes cocyta* (Cram.) (Northern Pearl Crescent) – 1-VII-2002 BCS BCSC.
 4522. *Limenitis arthemis* (Drury) (White Admiral) – 1-VII-2001 BCS BCSC.

SATYRIDAE – Browns and Alpines

4583. *Coenonympha inornata* Edw. (Inornate Ringlet) – 1-VII-2001 BCS BCSC and 27-VII-2003 AW.
 4587. *Cercyonis pegala* (Fabr.) (Common Wood Nymph) – 27-VII-2003 AW.
 4596. *Erebia discoidalis* (Kby.) (Red-disked Alpine) – 21-V-2000 CDB BIRD.
 4599. *Erebia epISODEA* Butl. (Common Alpine) – 13-VI-1999 EMP.
 4607. *Oeneis uhleri* (Reak.) (Uhler's Arctic) – 12-VI-1999 EMP.
 4608. *Oeneis alberta* Elwes (Alberta Arctic) – 4-V-2004 BCS.

DANAIDAE – Monarchs

4614. *Danaus plexippus* (L.) (Monarch) – 22-VI-2007 3 sight record by Nora Bryan.

PYRALIDAE Pyralid or Snout Moths

4703. *Gesneria centuriella* (D. & S.) – 23/24-VIII-1999 1 EM OLDS.
 4716. *Scoparia biplagiata* Wlk. – 20/21-VIII-2001 1 EM OLDS, 9-VIII-2002 2 CDB BIRD, 24-VIII-2002 1 CDB BIRD, 24B-VII-2003 1 CDB BIRD, 23/24-VII-2003 BL and 24-VII-2003 4 BS.
 4773. *Petrophila kearfottalis* (B. & McD.) – 5/6-VIII-1999 1 EM OLDS, 16/17-VIII-1999 1 EM OLDS, 3/4-VII-2000 1 EM OLDS, 8/9-VII-2001 4 CDB BIRD, 23/24-VII-2003 BL and 24-VII-2003 6 BS.
 4951. *Perispasta caeculalis* Zell. – 23/24-VI-2002 1 EM OLDS.
 4974. *Achyra bifidalis* (F.) – 9-VIII-2002 1 CDB BIRD.
 4987. *Sitochroa chortalis* (Grt.) – 21-VI-2000 2 CDB BIRD, 3/4-VII-2000 1 EM OLDS, 3/4-VII-2001 1 EM OLDS, 23/24-VI-2002 1 EM OLDS and 9-VIII-2002 2 CDB BIRD.
 5004. *Loxostege sticticalis* (L.) (Beet Webworm) – 3/4-VII-2000 2 EM BIRD, 9-VIII-2002 CDB BIRD, 23/24-VIII-2002 2 EM BIRD and 24A-VIII-2003 1 CDB BIRD.
 5017. *Loxostege cereralis* (Zell.) – 23/24-VIII-1999 1 EM OLDS and 3/4-VII-2000 1 EM BIRD.
 5068. *Pyrausta unifascialis* (Pack.) – 22-VI-2000 1 CDB BIRD and 3/4-VII-2000 1 EM OLDS.
 5074. *Pyrausta fodinalis* (Led.) – 3/4-VII-2000 2 EM BIRD, 8/9-VII-2001 3 EM BIRD, 23/24-VIII-2001 1 EM BIRD and 9-VIII-2002 1 CDB BIRD.
 5099. *Udea itysalis* (Wlk.) – 9-VIII-2002 1 CDB BIRD.
 5135. *Mecyna submedialis* (Grt.) – 8/9-VII-2001 3 EM BIRD, 9-VIII-2002 CDB 1 BIRD, 23/24-VII-2003 BL and 24-VII-2003 1 BS.
 5137. *Mecyna mustelinalis* (Pack.) – 3/4-VII-2000 1 EM BIRD and 8/9-VII-2001 1 EM BIRD.
 5156. *Nomophila nearctica* (Mun.) (Celery Stalkworm) – 8/9-VII-2001 1 EM BIRD and 23/24-VIII-2001 1 EM BIRD.
 5299. *Acentria nivea* (Olivier) – 24A-VIII-2003 1 CDB BIRD. *Now A. ephemerella*. Reported as new to Alberta from this and other areas in Pohl et al. (2005)
 5316. *Donacaula melinella* (Clem.) – 22/23-VII-1999 1 EM OLDS, 3/4-VII-2000 1 EM OLDS, 8/9-VII-2001 1 EM OLDS and 9-VIII-2002 1 CDB BIRD. The BIRD

- specimen has been sent for study to Edda Martinez at the Mississippi Entomological Museum as she is monographing the North American species of the genus.
5319. *Donaucaula longirostrella* (Clem.) – 3/4-VII-2001 1 EM OLDS.
- 5343a. *Crambus perlellus innotatellus* Wlk. – 3/4-VII-2000 1 EM BIRD, 8/9-VII-2001 3 EM BIRD and 9-VIII-2002 2 CDB BIRD.
- 5345a. *Crambus whitmerellus browni* Klots – 12/13-VI-2000 1 EM OLDS and 22-VI-2000 6 CDB BIRD.
5354. *Crambus ainsliellus* Klots/*leachellus* (Zinck.)– 3/4-VIII-2000 1 EM OLDS and 23/24-VIII-2001 1 EM BIRD.
5379. *Neodactria luteolellus* Clem. – 15-VI-2002 1 GGAC NFRC.
5391. *Chrysoteuchia topiaria* (Zell.) (Cranberry Girdler) – 22-VI-2000 CDB BIRD, 3/4-VII-2000 1 EM BIRD and 23/24-VII-2003 BL.
5393. *Raphiptera argillaceella* (Pack.) – 24-VII-2003 1 BS. One specimen was collected at a MV sheet by Dr. Brian Scholtens on the night of the Lepidopterist's Society "Mothing" on the east side of the Tolman Bridge Recreation Area. The specimen is in his collection. Brian is familiar with the species and is certain of the determination. This is a most unusual collection as the species is ordinarily associated with bogs.
5399. *Agriphila ruricolella* (Zell.) – 22-VI-2000 CDB BIRD, 10-VIII-2002 1 GGAC NFRC, 23/24-VII-2003 BL, 24B-VII-2003 1 CDB BIRD and 24B-VIII-2003 1 CDB BIRD.
5404. *Agriphila attenuata* (Grote) – 24B-VIII-2003 2 CDB BIRD. Not previously known from Alberta.
5408. *Catoptria latiradiella* (Wlk.) – 5/6-VIII-1999 1 EM OLDS, 15/16-VIII-1999 1 EM OLDS, 9-VIII-2002 CDB BIRD, 10-VIII-2002 1 GGAC NFRC, 23/24-VII-2003 BL and 24-VII-2003 1 BS.
- Pediasia* sp. – 9-VIII-2002 1 and 23-VII-2003 2 CDB BIRD. These could be *Pediasia aridella edmontella*, *Pedisia laciniella*, or even an undescribed species.
5413. *Pediasia trisecta* (Wlk.) (Sod Webworm Moth) – 23/24-VIII-2001 1 EM BIRD, 9-VIII-2002 CDB BIRD and 24B-VIII-2003 4 CDB BIRD.
5416. *Pediasia abnaki* (Klots) – 3-VII-2000 3 EM OLDS. Reported as new for Alberta from this and other localities in Pohl et al. (2005).
5417. *Pediasia dorsipunctella* (Kft.) – 9-VIII-2002 CDB BIRD, 10-VIII-2002 1 GGAC NFRC, 24-VIII-2002 CDB BIRD and 24-VII-2003 2 BS.
- 5441a. *Thaumatopsis fernaldella nortella* Kft. – 8/9-VII-2001 1 EM BIRD, 9-VIII-2002 CDB BIRD and 23/24-VII-2003 BL.
5455. *Euchromius californicalis* (Pack.) – 3/4-VII-2000 1 EM OLDS.
5518. *Aglossa cuprina* Zell. (Grease Moth) – 9-VIII-2002 1 CDB BIRD. Tentatively identified by Brian Scholtens. Confirmed by Charles Bird on the basis of specimens in the Canadian National Collection. This is a first for Alberta.
5585. *Toripalus trabalis* Grt. – 8/9-VII-2001 1 EM OLDS.
5655. *Acrobasis tricolorella* Grt. – 21/22-VII-1999 1 EM OLDS and 3/4-VII-2001 1 EM OLDS.
5718. *Myelopsis subtetricella* (Rag.) – 3/4-VII-2000 1 EM OLDS, 18/19-VI-2001 1 EM OLDS, 9-VIII-2002 CDB BIRD and 24-VIII-2002 CDB BIRD.

5719. *Myelopsis minutularia* (Hulst) – 24A-VIII-2003 1 CDB BIRD, 23-24-VII-2003 BL and 24-VII-2003 1 BS.
- 5746/5751. *Pima* spp. – 13/14-VI-2002 1 EM OLDS and 9-VIII-2002 CDB BIRD. These are *Pima boisduvaliella* (Gn.), or *P. fulvirugella* (Rag.). Though there are some general features that separate these two species, examination of the female genitalia is necessary to tell them apart (Neunzig 2003). Neunzig made *P. vividella* a synonym of *P. fulvirugella*.
5749. *Pima vividella* (McD.) – 12/13-VI-2000 1 EM OLDS, 23/24-VI-2000 1 EM OLDS and 8/9-VII-2001 EM BIRD.
5751. *Pima fulvirugella* (Rag.) – 4/5-VI-2000 1 EM OLDS, 12/13-VI-2000 1 EM OLDS and 3/4-VII-2000 1 EM OLDS.
5758. *Interjectio niiviella* (Hulst) – 8/9-VII-2002 1 EM BIRD.
5759. *Ambesa laetella* Grt. – 21/22-VII-1999 1 EM OLDS and 23/24-VII-2003 BL.
5799. *Nephoterix basilaris* Zell. – 22/23-VII-1999 1 EM OLDS, 18/19-VI-2000 1 EM OLDS, 27/28-V-2001 1 EM OLDS, 6/7-VI-2001 1 EM OLDS and 8/9-VII-2002 1 EM BIRD.
5827. *Pyla aenigmatica* Heinr. – 9-VIII-2002 CDB BIRD.
5829. *Pyla fusca* (Haw.) – 23/24-VIII-2001 1 EM BIRD, 9-VIII-2002 CDB BIRD and 24-VIII-2002 CDB BIRD.
5843. *Dioryctria reniculelloides* Mutuura & Mun. – 24-VIII-2002 CDB BIRD.
5886. *Lipographis fenestrella* (Pack.) – 24-VIII-2002 1 CDB BIRD. Described as new to Alberta from this and other areas in Pohl et al. (2005).
5918. *Hulstia undulatella* (Clem.) – 30/31-VII-2000 1 EM OLDS, 27/28-V-2001 1 EM OLDS, 23/24-VIII-2001 1 EM BIRD and 24-VIII-2002 CDB BIRD.
5946. *Phycitoides mucidella* (Rag.) – 24-VIII-2002 2 CDB BIRD.
5971. *Melitara dentata* (Grt.) – 3/4-VIII-2000 1 EM OLDS, 5-VIII-2001 1 GGA UASM, 3/4-IX-2001 1 EM OLDS, 9-VIII-2002 CDB BIRD and 24-VIII-2002 CDB BIRD.
6038. *Anerastia lotella* (Hbn.) – 3/4-VII-2000 1 EM OLDS and 23/24-VIII-2001 1 EM OLDS.
6053. *Peoria approximella* (Wlk.) – 3/4-VII-2000 1 EM OLDS, 8-VII-2001 CDB BIRD and 23/24-VIII-2001 1 EM OLDS.

PTEROPHORIDAE – Plume Moths

6102. *Trichoptilus lobidactyla* (Fitch) – 3/4-VII-2000 1 EM OLDS. *Now Dejongia lobidactyla*.
6107. *Gillmeria pallidactyla* (Haw.) – 12-VI-2000 1 DM UASM and 19-VI-2000 1 DM UASM.

THYATIRIDAE – Thyatirid Moths

6237. *Pseudothyatira cymatophoroides* (Gn.) (Tufted Thyatirid) – 3/4-VII-2000 1 EM BIRD and 23/24-VI-2002 1 EM OLDS.
6248. *Ceranemota albertae* Clarke (Alberta Lutestring) – 7-IX-2000 GGA GGAC, 9-IX-2000 4 GGA UASM, 23/24-VIII-2001 1 EM OLDS and 6-IX-2002 CDB BIRD.

DREPANIDAE – Hooktip Moths

6251. *Drepana arcuata* (Wlk.) (Arched Hooktip) – 23/24-VI-2002 1 EM OLDS.
 6252. *Drepana bilineata* (Pack.) (Two-lined Hooktip) – 21/22-VII-1999 1 EM OLDS,
 5/6-VIII-1999 1 EM OLDS and 23/24-VI-2002 1 EM OLDS.

GEOMETRIDAE – Inchworm or Geometrid Moths

6272. *Eumacaria latiferrugata* (Wlk.) (Brown-bordered Geometer) – 22/23-VI-2000 1 EM OLDS and 3/4-VII-2000 1 EM OLDS.
 6304. *Macaria bitactata* (Wlk.) – 15/16-VIII-1999 1 EM OLDS and 6/7-VI-2001 1 EM OLDS.
 6373. *Digrammia denticulata* Grt. – 5/6-VIII-1999 1 EM OLDS, 4/5-VI-2000 1 EM OLDS, 22-VI-2000 CDB BIRD, 4-VIII-2001 2 GGA UASM, 15/16-VI-2002 1 GGA UASM, 9-VIII-2002 CDB BIRD and 11-VIII-2004 1 GGA UASM.
 6380. *Digrammia californiaria* (Pack.) – 18-V-2000 1 GGA UASM and 11/12-VIII-2004 2 GGA UASM.
 6389. *Digrammia decorata* (Grossb.) – 4/5-VI-2001 1 EM OLDS, 23/24-VI-2002 1 EM OLDS, 9-VIII-2002 6 CDB BIRD and 24-VIII-2002 CDB BIRD.
 6394. *Digrammia rippertaria* (Dup.) (was *Semiothisa hebetata*) – 27/28-V-2001 1 EM OLDS, 20/21-VI-2001 1 EM OLDS, 9-VIII-2002 CDB BIRD and 24-VIII-2002 CDB BIRD.
 6396. *Digrammia neptaria* (Gn.) – 5/6-VIII-1999 1 EM OLDS, 27/28-V-2000 1 EM OLDS, 15/16-VI-2002 1 GGA UASM, 9-VIII-2002 12 CDB BIRD, 24-VIII-2002 CDB BIRD, 1-V-2004 2 GP POHL and 11/12-VIII-2004 2 GGA UASM.
 6397. *Digrammia mellistrigata* (Grt.) – 21/22-VII-1999 1 EM OLDS and 9-VIII-2002 CDB BIRD.
 6399. *Digrammia subminiata* (Pack.) – 13-VI-2002 1 EM UASM.
 6431. *Hesperumia sulphuraria* Pack. (Sulphur Moth) – 5/6-VIII-1999 1 EM OLDS and 11/12-VIII-2004 1 GGA UASM..
 6598. *Protoboarmia porcelaria* (Gn.) (Percelain Gray) – 8/9-VII-2001 1 EM OLDS.
 6640. *Biston betularia* (L.) (Salt-and-Pepper Geometer) – 22-VI-2000 CDB BIRD and 3/4-VII-2000 1 EM BIRD.
 6651. *Lycia ursaria* (Wlk.) (Stout Spanworm Moth) – 4/5-V-2000 1 EM OLDS, 1-V-2004 1 GP POHL and 4C-V-2005 1 CDB BIRD.
 6677. *Cabera erythemaria* Gn. (Yellow-dusted Cream Moth) – 3/4-VII-2000 1 EM OLDS and 6/7-VI-2001 1? EM OLDS.
 6678. *Cabera variolaria* Gn. (Pink-striped Willow Spanworm Moth) – 3/4-VII-2000 1 EM OLDS.
 6715. *Aspitates aberratus* (Hy. Edw.) – 22-VI-2000 CDB BIRD and 3/4-VII-2000 1 EM BIRD.
 6726. *Euchlaena obtusaria* (Hbn. (Obtuse *Euchlaena*) – 3/4-VII-2001 1 EM OLDS and 8/9-VII-2001 1 EM OLDS.
 6729. *Euclaena johnsonaria* (Fitch) (Johnson's *Euchlaena*) – 21/22-VII-1999 1 EM OLDS and 12/13-VI-2000 1 EM OLDS.

6731. *Euchlaena madusaria* McD. – 3/4-VII-2000 1 EM OLDS and 8/9-VII-2001 1 EM OLDS.
6734. *Euchlaena marginaria* (Wlk.) (Ochre *Euchlaena*) – 4/5-VI-2000 1 EM OLDS and 13/14-VI-2002 1 EM OLDS.
6737. *Euchlaena tigrinaria* (Gn.) (Mottled *Euchlaena*) – 22/23-VI-2000 1 EM OLDS and 10/11-VII-2000 1 EM OLDS.
6740. *Xanthotype urticaria* Swett (False *Crocus Geometer*) – 3/4-VII-2001 1 EM OLDS and 8/9-VII-2001 1 EM OLDS.
6743. *Xanthotype sospeta* (Drury) (The *Crocus Geometer*) – 8/9-VII-2001 1 EM OLDS.
6755. *Pero morrisonaria* (Hy. Edw.) (Morrison's *Pero*) – 21/22-VII-1999 1 EM OLDS, 22-VI-2000 CDB BIRD, 27/28-V-2001 1 EM OLDS and 15/16-VI-2002 1 GGA UASM.
6820. *Metanema determinata* Wlk. (Dark *Metanema*) – 6/7-VI-2001 1 EM OLDS and 23/24-VI-2002 1 EM OLDS.
6821. *Metarranthis warnerae* (Harv.) – 4/5-VI-2000 1 EM OLDS and 23/24-VI-2002 1 EM OLDS.
6822. *Metarranthis duaria* (Gn.) (Ruddy *Metarranthis*) – 22/23-V-2001 1 EM OLDS and 23/24-VI-2002 1 EM OLDS.
6837. *Probole alienaria* (H.-S.) – 22-VI-3000 1 CDB BIRD.
6838. *Probole amicaria* (H.-S.) (Friendly *Probole*) – 6/7-VI-2001 1 EM OLDS, 3/4-VII-2001 1 EM BIRD and 13/14-VI-2002 1 EM OLDS.
6926. *Plataea trilinearis* (Pack.) (Sagebrush Girdle) – 5/6-VIII-1999 1 EM OLDS and 23/24-VI-2002 1 EM OLDS.
6954. *Synaxis jubararia* (Hulst) (October Thorn) – 12/13-IX-1999 1 EM OLDS.
6963. *Tetracis crocallata* Gn. (Yellow Slant-line) – 22/23-VI-2000 1 EM OLDS and 23/24-VI-2002 1 EM OLDS.
6964. *Tetracis cachexiata* Gn. (White Slant-line) – 6/7-VI-2001 1 EM OLDS, 15/16-VI-2002 2 GGA UASM and 23/24-VI-2002 1 EM OLDS.
6982. *Prochoerodes transversata* (Drury) (Large Maple Spanworm) – 4-VIII-2001 1 GGA, UASM.
7018. *Nemoria unitaria* (Pack.) – 21/22-VI-1999 1 EM OLDS and 3/4-VIII-2000 1 EM OLDS.
7058. *Synchlora aerata* (F.) (Wavy-lined Emerald) – 5/6-VIII-1999 1 EM OLDS, 3/4-VII-2000 1 EM OLDS and 3/4-VII-2000 1 EM BIRD.
7065. *Chaetoscelis bistriaria* (Pack.) (Red-fringed Emerald) – 3/4-VII-2000 1 EM OLDS and 8/9-VII-2001 1 EM OLDS.
7125. *Idaea rotundopennata* Pack. (Round-winged Wave) – 12/13-VI-2000 1 EM OLDS.
7159. *Scopula limboundata* (Haw.) (Large Lace-border) – 3/4-VII-2001 1 EM OLDS.
7164. *Scopula junctaria* Wlk. (Simple Wave) – 3/4-VII-2000 1 EM OLDS.
7169. *Scopula inductata* Gn. (Soft-lined Wave) – 22-VI-2000 1 CDB BIRD, 3/4-VII-2000 1 EM OLDS, 8/9-VII-2001 1 EM OLDS and 8/9-VII-2001 1 EM BIRD.
7172. *Scopula sentinaria* (Gey.) – 22-VI-2000 CDB BIRD.
7199. *Eulithis propulsata* (Wlk.) (Barred Yellow or Currant *Eulithis*) – 4-VIII-2001 1 GGA UASM.
7201. *Eulithis testata* (L.) (Chevron Moth) – 24A-VIII-2003 1 CDB BIRD.
7205. *Eulithis flavibrunneata* (McD.) – 9-VIII-2002 CDB BIRD.

7207. *Eulithis xyлина* (Hulst) (The Phoenix) – 8/9-VII-2000 1 EM OLDS, 3/4-VIII-2000 1 EM OLDS and 8/9-VII-2001 1 EM BIRD.
7219. *Thera otisi* (Dyar) (Dyar's Carpet) – 3/4-VIII-2000 1 EM OLDS, 23/24-VIII-2001 6 EM OLDS, 9-VIII-2002 CDB BIRD and 11-VIII-2004 2 GGA UASM.
7294. *Rheumaptera subhastata* (Nolcken) – 13/14-VI-2002 1 EM OLDS.
7307. *Mesoleuca ruficillata* (Gn.) (White-ribboned Carpet) – 8/9-VII-2001 1 EM OLDS.
7328. *Perizoma custodiata* (Gn.) – 24/25-VIII-1999 1 EM OLDS, 4/5-VI-2000 1 EM OLDS, 23/24-VIII-2001 3 EM BIRD, 7-IX-2001 1 GGA UASM, 24A-VIII-2003 1 CDB BIRD and 24B-VIII-2003 1 CDB BIRD.
7388. *Xanthorhoe ferrugata* (Cl.) (Red Twin-spot) – 23/24-VI-2002 1 EM OLDS.
7399. *Euphyia unangulata* (Haw.) (Sharp-angled Carpet) – 5/6-VIII-1999 1 EM OLDS and 22/23-VI-2000 1 EM OLDS.
7408. *Zenopheps alpinata* (Cass.) – 3/4-VIII-2000 1 EM OLDS.
7440. *Eubaphe mendica* (Wlk.) (The Beggar) – 3/4-VIII-2000 1 EM OLDS.
7446. *Horisme incana* Swett – 22-VI-2000 CDB BIRD.
7487. *Eupithecia subfuscata* (Haw.) – 22-VI-2000 1 CDB BIRD.
7548. *Eupithecia lachrymosa* (Hulst) – 15/16-VI-2002 1 GGA UASM.
7552. *Eupithecia niphadophilata* (Dyar) – 24-VIII-2003 1 CDB BIRD.

LASIOCAMPIDAE – Tent Caterpillar or Lappet Moths

7687. *Phyllodesma americana* (Harr.) (Lappet Moth) – 19-V-2000 CDB BIRD, 19-V-2000 GGA SR, 12/13-VI-2000 1 EM OLDS and 4B-V-2005 2 CDB BIRD.
7698. *Malacosoma disstria* Hbn. (Forest Tent Caterpillar) – 5/6-VIII-1999 1 EM OLDS and 3/4-VII-2001 1 EM OLDS.
7702. *Malacosoma californicum* (Pack.) (Tent Caterpillar) – 21/22-VII-1999 1 EM OLDS, 3/4-VII-2001 1 EM OLDS and 8/9-VII-2001 1 EM BIRD.

SATURNIDAE – Giant Silk Moths

7757. *Antheraea polyphemus* (Cram.) (Polyphemus Moth) – 4/5-VI-2000 1 EM OLDS and 3/4-VII-2001 1 EM OLDS.
7769. *Hyalophora gloveri* (Stkr.) (*Hyalophora columbia* ssp. *gloveri*) (Glover's Silk Moth) – 18-V-2000 2 DL UASM and 22-VI-2000 BCS.

SPHINGIDAE – Sphinx Moths

7787. *Ceratomia undulosa* (Wlk.) (Waved Sphinx) – 3/4-VII-2001 1 EM OLDS.
7803. *Sphinx vashti* Stkr. (Vashti or Snowberry Sphinx) – 21/22-VII-1999 1 EM OLDS, 19-V-2000 GGA SR, 22/23-V-2001 1 EM OLDS, 23/24-VI-2002 1 EM OLDS, 1-V-2004 1 GP POHL and 4C-V-2005 1 CDB BIRD.
7812. *Sphinx drupiferarum* J.E. Smith (Wild Cherry Sphinx) – 17-V-1991 1 EMP UASM and 14/15-VI-2002 GGA GGAC.
7821. *Smerinthus jamaicensis* (Drury) (Two-spotted Sphinx) – 22/23-VII-1999 1 EM OLDS, 19-V-2000 GGA BCS, 3/4-VII-2000 2 EM BIRD and 27/28-V-2001 1 EM OLDS.

7822. *Smerinthus cerisyi* Kby (One-eyed Sphinx) – 19-V-2000 CDB BIRD, 3/4-VII-2000 2 EM BIRD and 3/4-VII-2001 1 EM OLDS.
7824. *Paonias excaecatus* (J.E. Smith) (Blinded Sphinx) – 12-VI-1999 EMP 1 UASM and 3/4-VII-2001 1 EM OLDS.
7825. *Paonias myops* (J.E. Smith) (Small-eyed Sphinx) – 17-V-1991 EMP UASM, 21/22-VII-1999 1 EM OLDS, 22-VI-2000 CDB BIRD and 3/4-VII-2000 1 EM BIRD.
7828. *Pachysphinx modesta* (Harr.) (Big Poplar Sphinx) – 23-VI-2002 EM OLDS.
7893. *Hyles gallii* (Rottemburg) (White-lined Sphinx) – 13-VI-2002 EM OLDS.

NOTODONTIDAE – Prominent Moths

7895. *Clostera albosigma* Fitch (Sigmoid Prominent) – 18/19-V-2000 1 EM OLDS, 17/18-VI-2000 1 EM OLDS and 3-VII-2000 CDB BIRD.
7901. *Clostera apicalis* (Wlk.) (Common Chocolate-tip or Red-marked Tentmaker) – 18/19-V-2000 1 EM OLDS, 19-V-2000 GGA SR and 12/13-VI-2000 1 EM OLDS.
7926. *Notodonta scitipennis* Wlk. (Base-streaked Prominent) – 3/4-VII-2000 1 EM OLDS.
7928. *Notodonta simplaria* Graef (Simple Prominent) – 27/28-V-2001 1 EM OLDS and 15/16-VI-2002 1 GGA UASM. Now regarded as synonymous with the Old World *Notodonta torva* (Hübner).
7931. *Gluphisia septentrionis* Wlk. (Small Pebble or Common Gluphisia) – 12/13-VI-2000 1 EM OLDS, 22-VI-2000 CDB BIRD and 3/4-VII-2000 1 EM BIRD.
7939. *Furcula occidentalis* (Lint.) (Willow Kitten) – 22-VI-2000 CDB BIRD.
7940. *Furcula scolopendrina* (Bdv.) (Poplar Kitten) – 3/4-VII-2000 2 EM BIRD.
8007. *Schizura unicornis* (J.E. Smith) (Variegated Prominent or Unicorn Caterpillar Moth) – 21/22-VII-1999 1 EM OLDS and 6/7-VI-2001 1 EM OLDS.
8012. *Oligocentria semirufescens* (Wlk.) (Rusty Prominent) – 6/7-VIII-1999 1 EM GGAC.

ARCTIIDAE – Tiger Moths and others

8043. *Eilema bicolor* (Grt.) (Yellow-edged Footman, Bicolored Moth or Smoky Moth) – 5/6-VIII-1999 1 EM OLDS, 9-VIII-2002 CDB BIRD and 24A-VIII-2003 1 CDB BIRD.
8051. *Crambidia casta* (Pack.) (Pearly-winged Lichen Moth) – 23/24-VIII-2001 1 EM BIRD, 7-IX-2001 2 GGA UASM, 9-VIII-2002 CDB BIRD, 24-VIII-2002 CDB BIRD, 24A-VIII-2003 3 CDB BIRD, 24B-VIII-2003 1 CDB BIRD and 11/12-VIII-2004 1 GGA UASM.
8089. *Hypoprepia miniata* (Kby) (Scarlet-winged Lichen Moth) – 5/6-VIII-1999 1 EM OLDS, 8/9-VII-2001 4 EM BIRD, 4-VIII-2001 2 GGA UASM, 23-VII-2003 2 CDB BIRD.
8111. *Haploa lecontei* (Guér.-Méneville) (Leconte's Haploa) – 3/4-VII-2000 1 EM OLDS.

8123. *Holomelina ferruginosa* (Wlk.) (Rusty Holomelina) – 3/4-VII-2000 1 EM BIRD, 3/4-VIII-2000 1 EM OLDS, 8/9-VII-2001 1 EM BIRD and 4-VIII-2001 1 GGA UASM.
8129. *Pyrrharctia isabella* (J.E. Smith) (Isabella Tiger Moth) – 21/22-VII-1999 1 EM OLDS, 4/5-VI-2000 1 EM OLDS, 17/18-VI-2000 1 EM OLDS, 3/4-VII-2000 1 EM BIRD and 15/16-VI-2002 1 GGA UASM.
8131. *Estigmene acraea* (Drury) (Salt Marsh Tiger Moth) – 5/6-VIII-1999 1 EM OLDS, 12/13-VI-2000 1 EM OLDS, 3/4-VII-2000 1 EM BIRD and 17/18-V-2001 1 EM OLDS.
8136. *Spilosoma dubia* (Wlk.) (Dubious Tiger Moth) – 22-VI-2000 CDB BIRD.
8137. *Spilosoma virginica* (F.) (Virginian Tiger Moth) – 21/22-VII-1999 1 EM OLDS, 5/6-VIII-1999 1 EM OLDS, 4/5-VI-2000 1 EM OLDS and 12/13-VI-2000 1 EM OLDS.
8144. *Hypercompe permaculata* (Pack.) (Many-spotted Tiger Moth) – 22-VI-2000 CDB BIRD and 3/4-VII-2000 2 EM BIRD.
8158. *Phragmatobia assimilans* Wlk. (Large Ruby Tiger Moth) – 19-V-2000 CDB BIRD.
8162. *Platarctia parthenos* (Harr.) (Saint Lawrence Tiger Moth) – 18/19-VI-2000 1 EM OLDS and 3/4-VII-2000 1 EM BIRD.
8175. *Grammia virguncula* (W. Kby) (Little Virgin Moth) – 3/4-VII-2001 1 EM OLDS.
8185. *Grammia blakei* (Grt.) – 15/16-VI-2002 1 GGA UASM.
8186. *Grammia williamsii* (Dodge (William's Tiger Moth) – 22-VI-2000 CDB BIRD, 8/9-VII-2001 1 EM BIRD and 4-VIII-2001 1 GGA UASM.
8196. *Grammia parthenice* (W. Kby.) (Parthenice Tiger Moth) – 5-VIII-2001 1 GGA UASM.
8197. *Grammia virgo* (L.) (Virgin Tiger Moth) – 21/22-VII-1999 1 EM OLDS, 19-V-2000 CDB BIRD and 3/4-VII-2000 1 EM BIRD.
8214. *Lophocampa maculata* Harr. (Spotted Tussock Moth) – 22-VI-2000 CDB BIRD, 3/4-VII-2000 1 EM BIRD and 15/16-VI-2002 1 GGA UASM.
8262. *Ctenucha virginica* (Esp.) (Virginia Ctenucha) – 22-VI-2000 CDB BIRD.
8267. *Ciseps fulvicollis* (Hbn.) (Yellow-collared Scape Moth) – 29-VII-1998 GGA GGAC and 3/4-VII-2000 1 EM OLDS.

NOCTUIDAE – Owlets or Noctuid Moths

8322. *Idia americalis* (Gn.) (American Idia or Snout Moth) – 17/18-VI-2000 1 EM OLDS and 3/4-VII-2000 1 EM BIRD.
- 8323.1. *Idia* sp. nr. *aemula* – 21/22-VII-1999 1 EM OLDS, 10/11-VII-2000 1 EM OLDS, 5-VIII-2001 2 GGA UASM and 27B-VI-2003 1 CDB BIRD.
8334. *Idia lubricalis* (Gey.) (Glossy Black Idia) – 5/6-VIII-1999 1 EM OLDS, 1-VII-2001 GGA & BCS GGAC, 8/9-VII-2001 1 EM BIRD, 5-VIII-2001 GGA UASM, 20/21-VIII-2001 1 GGA UASM, 23/24-VIII-2001 1 EM OLDS, 2-VIII-2002 1 GGA UASM and 11-VIII-2004 5 GGA UASM.
8356. *Chytolita petrealis* Grt. (Lesser Luteous Snout Moth) – 22-VI-2000 CDB BIRD.
8362. *Phalaenostola metonalis* (Wlk.) (Tufted Snout or Pale Phalaenostola) – 8/9-VII-2001 1 EM OLDS.

8370. *Bleptina caradrinalis* Gn. (Bent-winged Owlet) – 21/22-VII-1999 1 EM OLDS, 22-VI-2000 CDB BIRD and 3/4-VII-2001 1 EM OLDS.
8397. *Palthis angulalis* (Hbn.) (Dark-spotted Palthis) – 22/23-VI-2000 1 EM OLDS.
8452. *Bomolocha edictalis* (Wlk.) (Large Bomolocha) – 15/16-VIII-1999 1 EM OLDS.
- 8631a. *Synedoida petricola athabasca* (Neum.) (The Little Arches) – 20-V-2000 CDB GGAC, 21-V-2000 CDB BIRD and 23-VII-2003 1 CDB BIRD.
8632. *Drasteria hudsonica* (G. & R.) (Northern Arches) – 12/13-VI-2000 1 EM OLDS, 22-VI-2000 CDB BIRD, 3/4-VII-2000 1 EM BIRD, 22/23-V-2001 1 EM OLDS, 4-VIII-2001 1 GGA UASM, and 11/12-VIII-2004 1 GGA UASM.
8635. *Drasteria perplexa* (Hy. Edw.) (Perplexing Arches) – 23/24-VI-2002 1 EM OLDS.
8697. *Zale minerea* (Gn.) (Colorful Zale) – 12/13-VI-2000 1 EM OLDS.
8731. *Euclidea cuspea* (Hbn.) (Pointed Grass Moth) – 23/24-VI-2002 1 EM OLDS.
8738. *Caenurgina crassiuscula* (Haw.) (Clover Looper Moth) – 21/22-VII-1999 1 EM OLDS, 5/6-VIII-1999 1 EM OLDS, 23/24-VIII-1999 1 EM OLDS, 19-V-2000 CB GGAC, 3/4-VII-2000 1 EM OLDS, 10/11-VII-2000 1 EM OLDS, 3/4-VIII-2000 1 EM OLDS, and 20/21-V-2001 1 EM OLDS.
8739. *Caenurgina erechtea* (Cram.) (Forage Looper Moth) – 3/4-VIII-2000 1 EM OLDS, 9-VIII-2002 1 CDB BIRD and 11/12-VIII-2004 1 GGA UASM.
8803. *Catocala relictata* Wlk. (White Underwing) – 24A-VIII-2003 1 CDB SR and 24B-VIII-2003 1 CDB SR.
8805. *Catocala unijuga* Wlk. (Once-married Underwing) – 4-VIII-2001 1 GGA UASM.
8812. *Catocala hermia* Hy. Edw. (Hermia Underwing) – 4-VIII-2001 3 GGA UASM, 23/24-VIII-2001 1 EM OLDS, 15/16-IX-2001 1 EM OLDS, 24-VIII-2002 5 CDB BIRD, 6-IX-2002 3 CDB BIRD, 24A-VIII-2003 1 CDB BIRD, 24B-VIII-2003 1 CDB BIRD and 11/12-VIII-2004 2 GGA UASM.
8817. *Catocala briseis* Edw. (Briseis Underwing) – 29-VII-1998 GGA GGAC and 6-IX-2002 CDB BIRD.
8821. *Catocala semirelictata* Grt. (Semirelict Underwing) – 11/12-VIII-2004 1 GGA UASM.
8822. *Catocala meskei* Grt. (Meske's Underwing) – 29-VII-1998 GGA YALE.
8865. *Catocala praeclara* G. & R. (Praeclara Underwing) – 9-IX-2000 1 GGA UASM.
8867. *Catocala blandula* (Hulst) (Charming Underwing) – 4-VIII-2001 1 GGA UASM.
8881. *Abrostola urentis* Gn. (Variegated Brindle) – 8/9-VII-2001 1 EM BIRD and 23/24-VI-2002 1 EM OLDS.
8899. *Pseudeva purpurigera* (Wlk.) (Straight-lined Looper Moth) – 15/16-VIII-1999 1 EM OLDS and 11/12-VIII-2004 1 GGA UASM.
8911. *Autographa bimaculata* (Steph.) (Two-spotted Looper Moth) – 5-VIII-2001 1 GGA UASM.
8912. *Autographa mappa* (G. & R.) (Wavy Chestnut Y Moth) – 3/4-VII-2000 1 EM BIRD.
8914. *Autographa californica* (Speyer) (Alfalfa Looper Moth) – 6/7-VI-2001 1 EM OLDS and 23/24-VIII-2002 1 EM BIRD.
8923. *Autographa ampla* (Wlk.) (Large Looper Moth) – 5/6-VIII-1999 1 EM OLDS, 22-VI-2000 CDB BIRD, 3/4-VII-2000 1 EM BIRD and 2/3-VII-2001 1 EM OLDS.
8924. *Anagrapha falcifera* (Kby.) (Celery Looper Moth) – 12/13-VI-2000 1 EM OLDS and 23/24-VIII-2001 1 EM BIRD.

8926. *Syngrapha octoscripta* (Grt.) – 24-VIII-2002 CDB BIRD.
8929. *Syngrapha viridisigma* (Grt.) (Green-marked Looper Moth) – 20/21-VIII-2001 1 EM OLDS.
8950. *Plusia putnami* Grt. (Putnam's Looper Moth) – 22-VI-2000 CDB BIRD, 3/4-VII-2000 1 EM BIRD and 4-VIII-2001 1 GGA UASM.
8975. *Nycteola frigidana* (Wlk.) (Frigid Owlet) – 7-IX-2000 GGA GGAC, and 18/19-VI-2000 1 EM OLDS.
8977. *Nycteola cinereana* N. & D. (Grey Midget) - 9-IX-2000 1 GGA UASM.
8990. *Nola cilicoides* (Grt.) (Blurry-patched Nola) – 5/6-VIII-1999 1 EM OLDS and 8/9-VII-2001 2 EM BIRD.
9048. *Lithacodia albidula* (Gn.) (Common Midget) – GGAC.
9053. *Pseudostrotia carneola* (Gn.) (Pink-barred Lithacodia) – 21/22-VII-1999 1 EM OLDS, 21/22-VII-1999 1 EM OLDS, 3/4-VII-2000 1 EM OLDS, 27/28-V-2001 1 EM OLDS, 3/4-VII-2001 1 EM OLDS and 23/24-VI-2002 1 EM OLDS.
9101. *Tarachidia tortricina* (Zell.) (Olive-shaded Bird-dropping Moth) – 4/5-VI-2000 1 EM OLDS, 13/14-VI-2000 1 EM OLDS, 23/24-VI-2002 1 EM OLDS, 9-VIII-2002 CDB BIRD and 23/24-VII-2003 BL.
9110. *Conochares arizonae* (Hy. Edw. (Arizona Bird-dropping Moth) – 3/4-VII-2000 1 EM OLDS, 3/4-VII-2000 1 EM GGAC, 3/4-VIII-2000 1 EM OLDS, 22/23-V-2001 1 EM OLDS and 23/24-VII-2003 BL.
9111. *Tarachidia angustipennis* (Grt.) (Narrow-winged Midget) – 3/4-VII-2000 1 EM BIRD, 23/24-VIII-2001 1 EM BIRD and 9-VIII-2002 CDB BIRD. *Now T. flavicosta* (Sm.).
9193. *Raphia frater* Grt. (The Brother) – 21/22-VII-1999 1 EM OLDS, 4/5-VI-2000 1 EM OLDS, 3/4-VII-2000 1 EM BIRD and 27/28-V-2001 1 EM OLDS.
9203. *Acronicta dactylina* Grt. (American Dagger Moth) – 5/6-VIII-1999 1 EM OLDS, 18/19-VI-2000 1 EM OLDS, 3/4-VII-2001 1 EM OLDS and 13/14-VI-2002 1 EM OLDS.
9205. *Acronicta lepusculina* Gn. – 3/4-VII-2001 1 EM OLDS.
9207. *Acronicta innotata* Gn. (Unmarked Dagger Moth) – 5/6-VIII-1999 1 EM OLDS.
9212. *Acronicta grisea* Wlk. (Gray Dagger Moth) – 12/13-VI-2000 1 EM OLDS.
9224. *Acronicta quadrata* Grt. (Quadrate Dagger Moth) – 21/22-VII-1999 1 EM OLDS.
9226. *Acronicta superans* Gn. (The Chieftain Dagger Moth) – 21/22-VII-1999 1 EM OLDS and 23/24-VI-2002 1 EM OLDS.
9229. *Acronicta hasta* Gn. (Speared Dagger Moth) – 22/23-VI-2000 1 EM BIRD and 13/14-VI-2001 1 EM OLDS.
9257. *Acronicta impleta* Wlk. (Yellow-haired Dagger Moth) – 6/7-VI-2001 1 EM OLDS.
9258. *Acronicta sperata* Grt. (Sperata Dagger Moth) – 4/5-VI-2000 1 EM OLDS, 6/7-VI-2000 1 EM OLDS and 12/13-VI-2000 1 EM OLDS.
9261. *Acronicta impressa* Wlk. (Impressa or Willow Dagger Moth) – 19-V-2000 CDB BIRD, 5-VIII-2001 1 GGA UASM and 4B-B-2005 2 CDB BIRD.
9280. *Simyra henrici* (Grt.) (Henry's Marsh Moth) – 27/28-V-2001 1 EM OLDS, 5-VIII-2001 1 GGA UASM and 20/21-VIII-2001 1 EM OLDS.
9284. *Agriopodes teratophora* (H.-S.) (The Gray Marvel) – 22-VI-2000 CDB BIRD and 23/24-VI-2002 1 EM OLDS.

9341. *Apamea vultuosa* (Grt.) (Narrow-bordered or Airy Quaker) – 5/6-VIII-1999 1 EM OLDS, 18/19-VI-2000 1 EM OLDS and 3/4-VII-2001 1 EM OLDS.
9348. *Apamea amputatrix* (Fitch) (Yellow-headed Cutworm Moth) – 3/4-VII-2000 1 EM BIRD and 11-VIII-2004 1 GGA UASM.
9353. *Apamea inordinata* (Morr.) (Montana Quaker) – 12/13-VI-2000 1 EM OLDS.
9359. *Apamea commoda* (Wlk.) (Southern Quaker) – 10/11-VI-2000 1 EM OLDS as *A. cinefacta*, 3/4-VII-2000 1 EM BIRD, 10/11-VII-2000 1 EM OLDS and 8/9-VII-2001 2 EM BIRD.
9362. *Apamea indocilis* (Wlk.) (Broken-banded Quaker) – 12/13-VI-2000 1 EM OLDS.
9364. *Apamea sordens* (Bordered *Apamea*) – 12/13-VI-2000 1 EM OLDS and 17/18-VI-2000 1 EM OLDS. *Now A. finitima* Gn.
9365. *Apamea scoparia* (Hufn.) (Red-winged Quaker)– 22-VI-2000 CDB BIRD, 22/23-VI-2000 1 EM BIRD and 3/4-VII-2000 1 EM BIRD. *Now A. sp. near lateritia*.
- 9367a. *Apamea cogitata* (Sm.) (Ruby Quaker) – 22-VI-2000 CDB BIRD.
9369. *Apamea inficita* (Wlk.) – 9-VIII-2002 1 CDB BIRD.
9382. *Apamea devastator* (Brace) (Glassy Cutworm Moth) – 3/4-VII-2000 2 EM BIRD, 9-VIII-2002 CDB BIRD and 24-VIII-2002 CDB BIRD.
9383. *Apamea longula* (Grt.) (Mountain Quaker) – 5/6-VIII-1999 1 EM OLDS, 5-VIII-2001 1 GGA UASM and 11-VIII-2004 1 GGA UASM.
9391. *Luperina passer* (Gn.) (Dock Rustic) – 5/6-VIII-1999 1 EM OLDS, 10/11-VII-2000 1 EM OLDS, 15/16-IX-2001 1 EM OLDS and 11/12-VIII-2004 2 GGA UASM.
9396. *Eremobina claudens* (Wlk.) (Alberta Quaker) – 11-VIII-2004 1 GGA UASM.
9417. *Oligia egens* (Wlk.) (Neomogen's Quaker) – 11/12-VIII-2004 1 GGA UASM.
9419. *Oligia mactata* (Gn.) – 24A-VIII-2003 1 CDB BIRD.
9420. *Oligia illocata* (Wlk.) – 22-VI-2000 1 CDB BIRD.
9431. *Parastichtis suspecta* (Hbn.) (Mottled Quaker) – 4-VIII-2001 1 GGA UASM.
9434. *Spartiniphaga includens* (Wlk.) (Silver-C Borer) – 29-VII-1998 GGA and 9-VIII-2002 CDB BIRD.
9440. *Chortodes rufostrigata* (Pack.) (Brown-streaked Rustic) – 17/18-VI-2000 1 EM OLDS, 22-VI-2000 CDB BIRD, 3/4-VII-2000 1 EM OLDS, 4-VIII-2001 1 GGA UASM, 9-VIII-2002 CDB BIRD and 24-VIII-2002 CDB BIRD.
9443. *Chortodes defecta* (Grt.) (Narrow-winged Borer) – 9-VIII-2002 CDB BIRD.
9450. *Archanara subflava* (Grt.) (Subflava Sedge Borer) – 23/24-VIII-1999 1 EM OLDS, 3/4-VIII-2000 1 EM OLDS, 16/17-IX-2000 1 EM OLDS and 20/21-VIII-2001 1 EM OLDS.
9453. *Celaena reniformis* (Grt.) (Kidney-spotted Rustic) – 16/17-IX-2000 1 EM OLDS, 23/24-VIII-2001 1 EM OLDS, 9-VIII-2002 CDB BIRD and 24-VIII-2002 CDB BIRD.
9456. *Amphipoea interoceanica* (Sm.) – 4-VIII-2001 1 GGA UASM.
9457. *Amphipoea americana* (Speyer) or *interoceanica* (American Ear Moth) – 24A-VIII-2003 1 CDB BIRD.
9525. *Bellura obliqua* (Wlk.) (Cattail Borer Moth) – 13/14-VI-2002 1 EM OLDS.
9543. *Aseptis characta* (Grt.) – 1/2-VII-2001 1 EM, OLDS and 8/9-VII-2001 1 EM OLDS.
9549. *Enargia decolor* (Wlk.) (Angle-striped Sallow) – 24A-VIII-2003 1 CDB BIRD.

9564. *Andropolia contacta* (Wlk.) (Canadian Giant) – 17/18-VIII-1999 1 EM OLDS, 5-VIII-2001 1 GGA UASM and 9-VIII-2002 1 CDB BIRD.
9575. *Rhizagrotis cloanthoides* (Grt.) – 18-VII-2003 1 GGA & BCS UASM.
9626. *Trachea delicata* (Grt.) – 6/7-VI-2001 1 GGA UASM.
9640. *Amphipyra glabella* (Morr.) – 5-VIII-2001 1 GGA UASM.
9647. *Proxenus miranda* (Grt.) (Glistening Rustic) – 4/5-VI-2000 1 EM OLDS, 12/13-VI-2000 1 EM OLDS, 17/18-2000 1 EM OLDS, 22-VI-2000 CDB BIRD, 3/4-VII-2000 2 EM OLDS and 28/29-V-2001 1 EM OLDS.
9649. *Proxenus mendosa* McD. – 5/6-VIII-1999 1 EM OLDS, 22-VI-2000 CDB BIRD, 4-VIII-2001 2 GGA UASM and 5-VIII-2001 2 GGA UASM.
9654. *Platyperigea meralis* (Morr.) – 5-VIII-2001 GGA UASM and 9-VIII-2002 1 CDB BIRD.
9656. *Platyperigea montana* (Bremer) (Civil Rustic) – 12/13-VI-2000 1 EM OLDS, 17/18-VI-2000 1 EM OLDS, 22-VI-2000 CDB BIRD, 3/4-VII-2000 2 EM OLDS, 13-IX-2000 CDB BIRD, 5-VIII-2001 2 GGA UASM, 20/21-VIII-2001 1 EM OLDS, 9-VIII-2002 CDB BIRD, 24-VIII-2002 CDB BIRD, 24A-VIII-2003 2 CDB BIRD and 11/12-VIII-2004.
9681. *Elaphria festivoides* (Gn.) (Festive Midget) – 4/5-VI-2000 1 EM OLDS, 13/14-VI-2002 1 EM OLDS and 23/24-VI-2002 1 EM OLDS.
9690. *Condica videns* (Gn.) – 3/4-VII-2000 1 EM OLDS.
9874. *Xylena curvimacula* (Morr.) (Dot-and-Dash Swordgrass Moth) – 1 V-2004 1 GP POHL.
9875. *Xylena thoracica* (Putnam-Cramer) (Gray Swordgrass Moth) – 19-V-2000 GGA SR.
9876. *Xylena cineritia* (Grt.) (Western Swordgrass Moth) – 4C-V-2005 3 CDB BIRD.
9878. *Lithomoia germana* (Hbn.) (American Peasant) – GGAC and 23/24-VIII-2001 1 EM OLDS.
9884. *Litholomia napaea* (Morr.) (Dark Grey Peasant) – 19-V-2000 GGA GGAC and 4A-V-2005 1 CDB BIRD.
9891. *Lithophane amanda* (Sm.) (Distant Pinion) – 4/5-V-2000 1 EM OLDS and 1-V-2004 1 GP POHL.
9917. *Lithophane fagina* Morr. (Beech Pinion) – 4C-V-2005 2 CDB BIRD.
9952. *Eucirroedia pampina* (Gn.) (Spotted Sallow) – 6-IX-2002 CDB BIRD and 24A-VIII-2003 2 CDB BIRD.
9960. *Sunira verberata* (Sm.) (Western Sallow) – 6-IX-2002 CDB BIRD.
9962. *Anathix puta* (G. & R.) (Putta Sallow) – 4-VIII-2001 1 GGA UASM and 24A-VIII-2003 1 CDB BIRD.
9965. *Xanthia tatago* Laf. & Mik. (Pink-barred Sallow) – 23/24-VIII-2001 1 EM OLDS.
9974. *Fishia enthea* Grt. (Dark Fishia) – 12/15-IX-1998 1 EM OLDS, ?-IX-1999 GGA GGAC, 1/2-IX-1999 1 EM OLDS, 12/13-IX-1999 1 EM OLDS and 7-IX-2000 1 GGA UASM.
9987. *Mniotype ducta* (Grt.) (Alberta Rover) – 4/5-VI-2000 1 EM OLDS and 13/14-VI-2000 1 EM OLDS.
9988. *Mniotype tenera* (Sm.) (Miniota Rover) – 17/18-VI-2000 1 EM OLDS, 22-VI-2000 4 EM BIRD and 22-VI-2000 1 CDB BIRD.

10028. *Pleromelloida obliquata* (Sm.) (Oblique Rover) – 1-V-2004 3 GP POHL, 4B-V-2005 1 CDB BIRD and 4C-V-2005 4 CDB BIRD.
10059. *Homohadena badistriga* (Grt.) (Brown-lined Sallow) – 5-VIII-2001 1 GGA UASM.
10062. *Homohadena stabilis* Sm. (Brown Sallow) – 22-VI-2000 CDB BIRD, 4-VIII-2001 1 GGA UASM and 3/4-VII-2002 2 EM OLDS.
10065. *Homohadena infixa* (Wlk.) (Broad-lined Sallow) – 3/4-VII-2000 1 EM OLDS and 4-VIII-2001 1 GGA UASM.
10067. *Adita chionanthi* (J.E. Smith) (Fringed Tree Sallow) – 5/6-VIII-1999 1 EM OLDS, 17/18-VIII-1999 1 EM OLDS, 5-VIII-2001 2 GGA UASM and 23/24-VIII-2001 1 EM OLDS.
10124. *Oncocnemis cibalis* Grt. (Delicate Beauty) – 24/25-VIII-1999 1 EM OLDS and 3/4-IX-2001 1 EM OLDS.
10130. *Oncocnemis figurata* (Harv.) (Figured Beauty) – 12/13-VI-2000 1 EM OLDS, 3/4-VII-2000 1 EM OLDS, 3/4-VII-2001 1 EM OLDS and 24/25-VIII-2001 1 EM OLDS.
10135. *Oncocnemis riparia* Morr. (Greater Beauty) – 3/4-VII-2001 1 EM OLDS.
10143. *Oncocnemis mackiei* (B. & Benj.) (Mackie's Beauty) – 13-IX-2000 CDB BIRD, 23/24-VIII-2001 2 EM OLDS, 3/4-IX-2001 1 EM OLDS, 24A-VIII-2003 1 CDB BIRD and 24B-VIII-2003 1 CDB BIRD.
10194. *Cucullia intermedia* Speyer (Intermediate Cucullia or Goldenrod Cutworm Moth) – 12/13-VI-2000 1 EM OLDS.
10223. *Discestra trifolii* (Hufn.) (Clover Cutworm Moth) – 22/23-V-2001 1 EM OLDS, 13/14-VI-2002 1 EM OLDS, 4-VIII-2001 1 GGA UASM, 5-VIII-2001 1 GGA UASM, 9-VIII-2002 1 CDB BIRD and 11/12-VIII-2004 1 GGA UASM.
10224. *Discestra mutata* (Dod) (The Changeling) – 24B-VIII-2003 1 CDB BIRD.
- 10228c. *Discestra oregonica montanica* McD. – 19-V-2000 GGA GGAC.
10231. *Discestra obesula* (Sm.) (Obese Discestra) – 10/11-VII-2000 1 EM OLDS.
10232. *Discestra farnhami* (Grt.) (Farnham's Discestra) – 19/20-V-2000 1 EM OLDS, 19-V-2000 GGA GGAC, 12/13-VI-2000 1 EM OLDS and 17/18-VI-2000 1 EM OLDS.
10233. *Discestra crotchi* (Grt.) – 19-V-2000 GGA GGAC and 4B-V-2005 1 CDB BIRD.
10238. *Scotogramma submarina* (Grt.) – GGAC, 4/5-VI-2000 1 EM OLDS and 3/4-VII-2000 1 EM OLDS.
10265. *Sideridis rosea* (Harv.) (The Rosewing) – 18/19-V-2000 1 EM OLDS, 18-V-2000 GGA UASM, 29/30-V-2000 1 EM OLDS, 12/13-VI-2000 1 EM OLDS, 18/19-VI-2000 1 EM OLDS, 22-VI-2000 CDB BIRD, 3/4-VII-2000 2 EM OLDS and 13/14-VI-2002 1 EM OLDS.
10268. *Sideridis maryx* (Gn.) (Ruby Penman) – 4/5-VI-2000 1 EM OLDS, 22/23-VI-2000 1 EM OLDS and 13/14-VI-2002 1 EM OLDS.
10271. *Mamestra configurata* Wlk. (Bertha Armyworm) – 15/16-VIII-1999 1 EM OLDS and 3/4-VII-2000 1 EM OLDS.
10276. *Polia imbrifera* (Gn.) (Cloudy Arches) – 22-VI-2000 CDB BIRD.
10280. *Polia purpurissata* (Grt.) (Purple Arches) – 21/22-VII-1999 1 EM OLDS and 3/4-VII-2000 1 EM OLDS.
10281. *Polia nugatis* (Sm.) – 11-VIII-2004 1 GGA UASM.

10288. *Polia detracta* (Wlk.) (Disparaged Arches) – 22-VI-2000 2 CDB BIRD and 23/24-VI-2002 1 EM OLDS.
10290. *Polia obscura* (Sm.) (Obscure Arches) – 19-V-2000 1 GGA GGAC, 4/5-VI-2000 1 EM OLDS, 22-VI-2000 1 EM OLDS and 13/14-VI-2002 1 EM OLDS.
10293. *Melanchra picta* (Harr.) (Zebra Caterpillar Moth) – 12/13-VI-2000 1 EM OLDS.
10295. *Melanchra assimilis* (Morr.) (Black Arches) – 18/19-VI-2000 1 EM OLDS. 3/4-VII-2000 1 EM OLDS and 6/7-VII-2002 1 EM OLDS.
10296. *Lacanobia nevadae* (Grt.) (Nevada Arches) – 5/6-VIII-1999 1 EM OLDS and 3/4-VII-2001 1 EM OLDS.
10297. *Lacanobia atlantica* (Grt.) (Atlantic Arches) – 19-V-2000 2 CDB BIRD, 12/13-VI-2000 1 EM OLDS, 18/19-VI-2000 1 EM OLDS, 22-VI-2000 1 CDB BIRD, 3/4-VII-2000 2 EM OLDS, 3/4-VII-2000 EM BIRD, 6/7-VI-2001 1 EM OLDS and 1-V-2004 2 GP POHL.
10298. *Lacanobia radix* (Wlk.) (Garden Arches) – 19-V-2000 GGA GGAC, 12/13-VI-2000 1 EM OLDS, 22-VI-2000 CDB BIRD, 3/4-VII-2000 2 EM OLDS and 13/14-VI-2002 1 EM OLDS.
10299. *Lacanobia subjuncta* (G. & R.) – 22-VI-2000 1 CDB BIRD.
10300. *Spiramater grandis* (Gn.) (Pale-banded Arches) – 4/5-VI-2000 1 EM OLDS, 3/4-VII-2000 1 EM OLDS, 6/7-VI-2001 1 EM OLDS and 13/14-VI-2002 1 EM OLDS.
10301. *Spiramater lutra* Gn. (Darling Arches) – 12/13-VI-2000 1 EM OLDS, 18/19-VI-2000 1 EM OLDS, 22/23-VI-2000 1 EM OLDS and 3/4-VII-2000 1 EM OLDS.
10303. *Lacanobia tacoma* (Stkr.) (Tacoma Arches) – 12/13-VI-2000 1 EM OLDS and 22/23-V-2001 1 EM OLDS.
10305. *Trichordestra dodii* (Sm.) (Dod's Arches) – 4/5-VI-2000 1 EM OLDS, 18/19-VI-2000 1 EM OLDS, 22-VI-2000 2 EM BIRD, 3/4-VII-2000 4 EM OLDS and 8/9-VII-2001 1 EM BIRD.
10307. *Trichordestra lilacina* (Harv.) (Lilac Arches) – 10/11-VII-2000 1 EM OLDS, 10/11-IX-2000 1 EM OLDS, 8/9-VII-2001 1 EM BIRD and 4-VIII-2001 1 GGA UASM.
10308. *Trichordestra liquida* (Grt.) (Liquid Arches) – 12/13-VI-2000 1 EM OLDS, 17/18-VI-2000 1 EM OLDS, 8/9-VII-2001 2 EM BIRD and 13/14-VI-2002 EM OLDS.
10310. *Papestra quadrata* (Sm.) (Quadrated Arches) – 18/19-V-2000 1 EM OLDS, 19-V-2000 GGA GGAC, 29/30-V-2000 1 EM OLDS, 4/5-VI-2000 1 EM OLDS, 22/23-V-2001 1 EM OLDS and 27/28-VI-2001 1 EM OLDS.
10368. *Lacinipolia meditata* (Grt.) (The Thinker) – GGAC.
10370. *Lacinipolia lustralis* (Grt.) (Lustrous Arches) – 12/13-VI-2000 1 EM OLDS, 17/18-VI-2000 1 EM OLDS, 22-VI-2000 CDB BIRD and 3/4-VII-2000 1 EM OLDS.
10372. *Lacinipolia anguina* (Grt.) (Snaky Arches) – 19-V-2000 CDB BIRD, 19-V-2000 GGA SR, 4/5-VI-2000 1 EM OLDS, 12/13-VI-2000 1 EM OLDS, 22-VI-2000 CDB BIRD, 18/19-V-2001 1 EM OLDS and 27/28-V-2001 1 EM OLDS.
10394. *Lacinipolia vicina* (Grt.) (Small Grey Arches) – 12/13-VI-2000 1 EM OLDS, 22-VI-2000 CDB BIRD, 3/4-VII-2000 1 EM OLDS, 3/4-VII-2001 5 EM OLDS and 5-VIII-2001 1 GGA UASM.

10395. *Lacinipolia pensilis* (Grt.) (Pacific Polia) – 3/4-VII-2000 1 EM OLDS and 24A-VIII-2003 1 CDB BIRD.
10397. *Lacinipolia renigera* (Steph.) (Kidney-spotted Arches) – 3/4-VII-2000 2 EM OLDS and 9-VIII-2002 CDB BIRD.
10405. *Lacinipolia lorea* (Gn.) (Bridled Arches) – 17/18-VI-2000 1 EM OLDS, 22-VI-2000 CDB BIRD and 3/4-VII-2000 1 EM OLDS.
10406. *Lacinipolia olivacea* (Morr.) (Olive Arches) – 27-VIII-2002 CDB BIRD.
10428. *Dargida procincta* (Grt.) (The Girdler) – 6/7-VI-2001 1 EM OLDS, 20/21-VIII-2001 1 EM OLDS and 23/24-VIII-2001 1 EM OLDS.
10431. *Faronta diffusa* (Wlk.) (Wheathead Armyworm Moth) – 12/13-VI-2000 1 EM OLDS, 22/23-V-2001 1 EM OLDS and 13/14-VI-2002 1 EM OLDS.
10436. *Aletia oxygala* (Grt.) (Lesser Wainscot) – 3/4-VII-2000 1 EM OLDS and 10/11-VII-2000 1 EM OLDS.
10438. *Pseudaletia unipuncta* (Haw.) (Armyworm Moth) – GGAC, 6/7-VI-2001 1 EM OLDS.
10446. *Leucania multilinea* Wlk. (Many-lined Wainscot) – 22-VI-2000 CDB BIRD, 3/4-VII-2000 1 EM OLDS and 9-VIII-2002 1 CDB BIRD.
10447. *Leucania commoides* Gn. (Common Wainscot) – 22-VI-2000 1 EM BIRD and 3/4-VII-2000 1 EM OLDS.
10449. *Leucania insueta* Gn. (Heterodox Wainscot) – 12/13-VI-2000 1 EM OLDS and 22VI-2000 1 EM BIRD.
10471. *Stretchia plusiaeformis* Hy. Edw. (Grey Spectacles) – 26/27-IV-2000 1 EM OLDS.
10490. *Orthosia revicta* (Morr.) (Subdued Quaker) – 18-V-2000 GGA SR and 4B-V-2005 2 CDB BIRD.
10493. *Orthosia segregata* (Sm.) (Segregate Penman) – 1-V-2004 1 GP POHL and 4B-V-2005 4 CDB BIRD.
10493. *Orthosia segregata* (Sm.) f. *negussa* (Sm.) – 1-V-2004 2 GP POHL and 4B-V-2005 1 CDB BIRD.
10495. *Orthosia hibisci* (Gn.) (Variable Penman or Speckled Green Fruitworm Moth) – 4B-V-2005 1 CDB BIRD and 4C-V-2005 4 CDB BIRD.
10501. *Crocigrapha normani* (Grt.) (Norman's Quaker) – 18/19-V-2000 1 EM OLDS and 19-V-2000 CDB GGAC.
10513. *Egira dolosa* (Grt.) (Grieving Woodling or Greater Black-letter Dart) – 4B-V-2005 1 CDB BIRD.
10524. *Nephelodes minians* Gn. (Bronzed Cutworm Moth) – 15/16-VIII-1999 1 EM OLDS, 23/24-VIII-1999 1 EM OLDS, 29A-VIII-2003 1 CDB BIRD and 24B-VIII-2003 1 CDB BIRD.
10530. *Anhimela contrahens* (Wlk.) (Brown Stylus) – 5/6-VIII-1999 1 EM OLDS and 4-VIII-2001 1 GGA UASM.
10563. *Protorthodes oviduca* (Gn.) (Ruddy Quaker) – 19-V-2000 GGA SR and 22-VI-2000 CDB BIRD.
10641. *Agrotis vetusta* Wlk. (Old Man Dart) – 20/21-VIII-2001 1 EM OLDS, 23/24-VIII-2001 1 EM OLDS and 9-VIII-2002 CDB BIRD.
10645. *Agrotis orthogonia* Morr. (Pale Western Cutworm) – 20/21-VIII-2001 1 EM OLDS, 24A-VIII-2003 1 CDB BIRD and 11/12-VIII-2004 1 GGA UASM.

10650. *Agrotis robustior* (Sm.) (Robust Dart) – 22/23-VIII-1999 1 EM OLDS, 24/25-VIII-1999 1 EM OLDS, 12/13-VIII-2001 1 EM OLDS, 20/21-VIII-2001 1 EM OLDS, 23/24-VIII-2001 1 EM OLDS and 14-VIII-2002 CDB BIRD.
10651. *Agrotis venerabilis* Wlk. (Venerable Dart) – 23/24-VIII-2001 1 EM OLDS, 24-VIII-2002 CDB BIRD, 6-IX-2002 CDB BIRD and 24B-VIII-2003 1 CDB BIRD.
10652. *Agrotis vancouverensis* Grt. (Vancouver Dart) – 18-V-2000 1 GGA UASM, 22-VI-2000 2 CDB BIRD and 3/4-VII-2000 2 EM OLDS..
10670. *Feltia jaculifera* (Gn.) (Dingy Cutworm Moth) – 9-VIII-2002 CDB BIRD, 24-VIII-2002 CDB BIRD and 24B-VIII-2003 1 CDB BIRD.
- 10698.2. *Trichosilia mollis* (Wlk.) – 21/22-VII-1999 1 EM OLDS, 5/6-VIII-1999 1 EM OLDS, 8/9-VII-2001 2 EM BIRD and 4-VIII-2001 1 GGA UASM.
- 10701.1. *Euxoa adumbrata* (Ev.) – 3/4-VIII-2000 1 EM OLDS, 20/21-VIII-2001 1 EM OLDS and 23/24-VI-2002 1 EM OLDS.
- 10701.2. *Euxoa auxiliaris* (Grt.) (Army Cutworm) – 13/14-VI-2002 1 EM OLDS and 24-VIII-2002 2 CDB BIRD.
10702. *Euxoa divergens* (Wlk.) (Divergent Dart) – 3/4-VII-2000 2 EM OLDS & BIRD, 16/17-VI-2000 1 EM OLDS and 22-VI-2000 1 CDB BIRD.
10705. *Euxoa messoria* (Harr.) (Reaper Dart) – 3/4-VII-2000 2 EM OLDS and 9-IX-2000 GGA UASM.
10723. *Euxoa tristicula* (Morr.) (Early Cutworm) – 18-V-2000 1 BCS UASM, 12/13-VI-2000 1 EM OLDS, 17/18-VI-2000 1 EM OLDS, 22-VI-2000 CDB BIRD and 3/4-VII-2000 1 EM OLDS.
10728. *Euxoa pestula* Sm. (Pestula Dart) – 3-IX-2002 CDB BIRD.
10738. *Euxoa mimallonis* (Grt.) (Ruddy Dart) – 23/24-VIII-2001 1 EM OLDS.
10755. *Euxoa declarata* (Wlk.) (Clear Dart) – 23/24-VIII-2001 2 EM OLDS & BIRD, 3/4-IX-2001 1 EM OLDS and 24-VIII-2002 1 CDB BIRD.
10756. *Euxoa campestris* (Grt.) (Flat Dart) – 4-VIII-2001 1 GGA UASM, 23/24-VIII-2001 2 EM OLDS and 11/12-VIII-2004.
10777. *Euxoa aequalis* (Harv.) (Aequalis Dart) – 5/6-VIII-1999 1 EM UASM and 7-IX-2000 1 GGA UASM.
10780. *Euxoa comosa* (Morr.) (Hairy Dart) – 4-VIII-2001 6 GGA UASM, 5-VIII-2001 7 GGA UASM, 23/24-VIII-2001 EM BIRD, 24-VIII-2002 2 CDB BIRD and 11/12-VIII-2004 7 GGA UASM.
10794. *Euxoa setonia* McD. (Seton Lake Dart) – 22/23-VII-1999 1 EM GGAC, 12/13-VI-2000 1 EM OLDS, 22-VI-2000 CDB BIRD, 3/4-VII-2000 1 EM OLDS, 10/11-VII-2000 1 EM OLDS, 3/4-VIII-2000 1 EM OLDS, 6/7-VI-2001 1 EM OLDS, 1-VII-2001 1 GGA UASM, 3/4-VII-2001 1 EM OLDS, 4-VIII-2001 1 GGA UASM, 3/4-IX-2001 1 EM OLDS and 3/4-VI-2002 1 EM OLDS.
10798. *Euxoa basalis* (Grt.) (Pale-based Dart) – 11/12-VIII-2004 1 GGA UASM.
10801. *Euxoa ochrogaster* (Gn.) (Red-backed Cutworm Moth) – 5-VIII-2001 2 GGA UASM, 9-VIII-2001 CDB BIRD, 20/21-VIII-2001 1 EM OLDS, 23/24-VIII-2001 1 EM OLDS and 2 BIRD, 24-VIII-2001 CDB BIRD, 9-VIII-2002 2 CDB BIRD, 24-VIII-2002 CDB BIRD, 6-IX-2002 1 and 24A-VIII-2003 1 CDB BIRD.
10804. *Euxoa plagigera* (Morr.) (Plaited Dart) – 15/16-VIII-1999 1 EM OLDS, 19/20-VIII-1999 1 EM OLDS and 11/12-VIII-2004 1 GGA UASM.

10805. *Euxoa tessellata* (Harr.) (Tessellate Dart) – 3/4-VII-2001 1 EM OLDS, 5-VIII-2001 4 GGA UASM, 20/21-VIII-2001 1 EM OLDS, 23/24-VIII-2001 1 EM OLDS and 3/4-IX-2001 1 EM OLDS.
10807. *Euxoa albipennis* (Grt.) (White-winged Dart) – 23/24-VIII-2001 1 EM OLDS.
10813. *Euxoa medialis* (Sm.) (Median-banded Dart) – 16/17-IX-2000 1 EM OLDS and 15/16-IX 2001 1 EM OLDS.
10817. *Euxoa obeliscoides* (Gn.) (Obelisk Dart) – 23/24-VIII-2001 1 EM OLDS, 23/24-VIII-2001 1 EM OLDS, 3/4-IX-2001 1 EM OLDS and 24-VIII-2002 CDB BIRD.
- 10826.1. *Euxoa castanea* Laf. – 4-VIII-2001 1 GGA UASM and 5-VIII-2001 GGA UASM.
10830. *Euxoa quadridentata* (G. & R.) (Four-toothed Dart) – GGAC, 23/24-VIII-1999 1 EM OLDS, 23/24-VIII-2001 EM BIRD and 24A-VIII-2003 1 CDB BIRD.
10834. *Euxoa oblongistigma* (Sm.) (Oblong Dart) – 29-VII-1999 1 GGA UASM and 5-VIII-2001 1 GGA UASM.
10836. *Euxoa dargo* (Stkr.) (Dargo Dart) – GGAC.
10842. *Euxoa tronella* (Sm.) – 23/24-VIII-2001 1 EM, UASM.
- 10852/4. *Euxoa auripennis* Laf. or *servita* (Sm.) – 23/24-VIII-2001 1 EM OLDS, 24-VIII-2002 CDB BIRD and 24A-VIII-2003 1 CDB BIRD.
10854. *Euxoa servita* (Sm.) (Servita Dart) – 23/24-VIII-1999 1 EM OLDS.
10860. *Euxoa perolivalis* (Sm.) – 4-VIII-2001 1 GGA UASM and 5-VIII-2001 2 GGA UASM.
10861. *Euxoa ridingsiana* (Grt.) (Riding's Dart) – 29-VII-1998 1 GGA UASM, 4-VIII-2001 3 GGA UASM, 9-VIII-2002 2 CDB BIRD and 24B-VIII-2002 4 CDB BIRD.
- 10861.1. *Euxoa maimes* (Sm.) – GGAC.
10864. *Euxoa flavicollis* (Sm.) (Yellow-lined Dart) – 11/12-VIII-2004 1 GGA UASM.
10891. *Ochropleura plecta* (L.) (Flame-shouldered Dart) – 22/23-VI-2000 1 EM OLDS.
10894. *Protopygia querula* (Dod) – 1-VII-2001 BCS GGAC.
10905. *Euagrotis exuberans* (Sm.) – 4-VIII-2001 1 GGA UASM and 5-VIII-2001 1 GGA UASM.
10910. *Anicla tepperi* (Sm.) (Black-girdled Dart) – 1/2-VIII-1999 1 EM OLDS, 12/13-VI-2000 1 EM OLDS, 18/19-VI-2000 1 EM OLDS, 22-VI-2000 2 CDB BIRD, 3/4-VII-2000 1 EM OLDS and 3/4-VII-2000 1 EM OLDS.
10915. *Peridroma saucia* (Hbn. (Variegated Cutworm Moth) – 6/7-VII-2001 1 EM OLDS.
10917. *Diarsia rubifera* (Grt.) (Rubifera Dart) – 29-VII-1998 GGAC.
10923. *Actebia balanitis* (Grt.) (Acorn Dart) – GGAC, 3/4-IX-2001 1 EM OLDS and 24A-VIII-2003 2 CDB BIRD.
10926. *Spaelotis clandestina* (Harr.) (Clandestine Dart) – 22/23-VI-2000 1 EM OLDS, 3/4-VII-2000 1 EM OLDS and 24-VIII-2002 CDB BIRD.
- 10927.1. *Spaelotis bicava* Laf. – 17/18-VI-2000 1 EM OLDS.
10929. *Eurois occulta* (L.) (Great Gray Dart) – 24-VIII-2002 CDB BIRD, 6-IX-2002 CDB BIRD and 24A-VIII-2003 1 CDB BIRD.
10930. *Eurois astricta* Morr. (Great Brown Dart) – 21/22-VII-1999 1 EM OLDS and 10/11-VII-2000 1 EM OLDS.

10931. *Eurois nigra* (Sm.) (Great Black Dart) – 29-VII-1998 GGA GGAC and 3/4-VIII-2000 1 EM OLDS.
10942. *Xestia c-nigrum* L. (Black-letter Dart) – 22-VI-2000 CDB BIRD and 24A-VIII-2003 1 CDB BIRD.
10944. *Xestia smithii* (Snell) (Spotted Clay Dart) – 11/12-VIII-2004 1 GGA UASM.
10947. *Xestia oblata* (Morr.) (Ruby Dart) – 8/9-VII-2001 1 EM OLDS.
10950. *Pseudohermonassa bicarnea* (Gn.) – 2-VIII-2002 3 GGA UASM.
10951. *Pseudohermonassa tenuicula* (Morr.) (Hair-pin Dart) – 2-VIII-2002 1 GGA UASM.
10954. *Agnorisma bugrai* (Koçak) (Collared Dart) – 23/24-VIII-1999 1 EM OLDS, 9/10-VIII-2002 1 EM BIRD, 24A-VIII-2003 1 CDB BIRD, 24B-VIII-2003 2 CDB BIRD and 11/12-VIII-2004 1 GGA UASM.
10992. *Paradiarsia littoralis* (Pack.) (Labrador Dart) – 3/4-VII-2000 1 EM BIRD, 17/18-VI-2000 1 EM OLDS, 22-VI-2000 CDB BIRD and 3/4-VII-2002 2 EM OLDS.
11004. *Protolampra rufipectus* (Morr.) (Red-breasted Dart) – 4-VIII-2001 1 GGA UASM, 5-VIII-2001 1 GGA UASM and 9-VIII-2002 CDB BIRD.
11008. *Eueretagrotis perattenta* (Grt.) – 3/4-VII-2000 1 EM BIRD.
11012. *Cryptocala acadensis* (Bethune) (Catocaline Dart) – 4-VIII-2001 1 GGA UASM.
11018. *Abagrotis trigona* (Sm.) – 5-VIII-2001 2 GGA UASM and 11/12-VIII-2004 2 GGA UASM.
11040. *Abagrotis reedi* Buckett – 4-VIII-2001 1 GGA UASM, 5-VIII-2001 1 GGA UASM, 23/24-VIII-2001 1 EM BIRD and 9-VIII-2002 1 CDB BIRD.
11041. *Abagrotis placida* (Grt.) (Placid Dart) – 4-VIII-2001 9 GGA UASM, 3/4-VII-2000 1 EM OLDS, 9-IX-2000 2 GGA UASM and 11-VIII-2004 11 GGA UASM.
11041. *Abagrotis placida* (Grt.) group – 9-VIII-2002 3 and 24A-VIII-2003 1 CDB BIRD.
- 11041.1. *Abagrotis hermina* Laf. – 24-VIII-2002 CDB BIRD.
11043. *Abagrotis cupida* (Grt.) – 9-IX-2000 2 GGA GGAC.
- 11049.1. *Pronoctua peabodyae* (Dyar) – 11-VIII-2004 1 GGA UASM.
11068. *Helicoverpa zea* (Boddie) – 7-IX-2001 1 GGA UASM.
11175. *Schinia meadi* (Grt.) (Mead's Flower Moth) – 3/4-VII-2000 1 EM OLDS.
11192. *Schinia cumatilis* (Grt.) (Silver-banded Gem) – 29-VII-1998 4 GGA GGAC, 21/22-VII-1999 1 EM OLDS, 14/15-VIII-1999 1 EM OLDS, 23/24-VIII-1999 1 EM OLDS, 3/4-VIII-2000 1 EM OLDS and 11/12-VIII-2004 1 GGA UASM.

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 (TB) is most similar to DI (47.33%), BL (44.92%), BK (43.61%) and AH (43.58%); and least similar to JC (25.68%) and LF (25.89%). The J.J. Collett Natural Area, has quite different habitats, especially spruce woods, than are present in TB.

SUMMARY

The Tolman Bridge area (TB) has many species in common with those of Dry Island Buffalo Jump Provincial Park (DI). The latter, however, has more habitats,

especially north-facing slope, white spruce woods and thus has a greater number of species. The considerable biodiversity evident in TB is possible because of its varied terrain, soil types, and relatively undisturbed condition.

Of the 12 areas involved in this study, thirty-two species are known only from Tolman Bridge: *Sesia tibialis*, *Synanthedon proxima*, *Olethreutes cespitana*, *Phaneta crassana*, *Epiblema abruptana* ?, *Raphiptera argillaceella*, *Aglossa cuprina*, *Interjectio nivella*, *Digrammia decorata*, *D. subminiata*, *Metarranthis warnerae*, *Rheumaptera subhastata*, *Eupithecia niphadophilata*, *Grammia blakei*, *Catocala praeclara*, *Syngrapha viridisigma*, *Acronicta lepusculina*, *Acronicta hasta*, *Apamea contradicta*, *Rhizagrotis cloanthoides*, *Amphipyra glabella*, *Conditia videns*, *Fishia enthea*, *Discestra obesula*, *Sideridis maryx*, *Lacinipolia pensilis*, *E. oblongistigma*, *E. tronella*, *E. perolivalis*, *Pseudohermonassa bicarnea*, *Pronoctua peabodyae* and *Helicoverpa zea*.

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USEFUL ONLINE INFORMATION SOURCES ON MOTHS

Information on many of our Alberta moths can be found at the Entomology Collection Search site of the E.H. Strickland ED. Lynn Scott has a web site with natural photos of over 400 species of moths that she has found in Ottawa, Ontario (<http://www.hei.ca/dls/mothindex.html>). As many of the species also occur in Alberta, these images can be quite helpful.

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://www.hei.ca/dls/mothindex.html>). As many of the species also occur in Alberta, these images can be quite helpful

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