

2013 Update to the Checklist of the Lepidoptera of Alberta

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Introduction: This is the third annual update to the “Annotated list of the Lepidoptera of Alberta, Canada” (Pohl et al. 2010). The previous updates are published in the Alberta Lepidopterists' Guild Newsletter (Pohl et al. 2011, 2012). Once again a number of new species were discovered and described in the province, and the revised list now stands at 2461 reported species. We detail several significant finds and range extensions of AB species already on the list, and add several species to the Excluded Species list. We also report some errors discovered in the 2010 document, and detail the ramifications of recent taxonomic changes published elsewhere. If you are aware of further additions or deletions to the AB Lepidoptera list, please contact the lead author at gpohl[at]nrcan.gc.ca.

Additions to the Annotated list of the Lepidoptera of Alberta:

Coleophoridae:

198.5 *Coleophora asterophagella* McDunnough, 1944). A male specimen in the Canadian National Collection (CNC) collected from The Palisades, Jasper National Park, 27 Jun 2006, by Chris Schmidt & GG Anweiler was confirmed via barcoding.

200.3 *Coleophora gaylussaciella* Heinrich, 1915. A specimen in the CNC collected 3 km north of Nevis, 11 July 2003, by CD Bird was confirmed via barcoding.

200.5 *Coleophora cornivorella* McDunnough, 1945. Three specimens in the CNC collected near Sherwood Park, (two on 26 June 2000, and one on 29 June 2000), by GR Pohl have been confirmed via barcoding.

207.5 *Coleophora bistrigella* Chambers, 1875. A specimen in the CNC collected at the Pakowki Lake dunes, 16 Aug 2006, by Jason Dombroskie has been confirmed via barcoding.

Gelechiidae:

264.5 *Sinoe chambersi* Lee, 2012. This species was described in a paper published last year by Lee & Brown (2012). Among the paratypes are AB specimens from Touchwood Lake (misspelled "Torchwood" in the paper), Buck Lake, Dunvegan, Edmonton, and Wagner Bog. Collection dates in AB range from 28 April to 31 May. This uncommon species occurs across North America from MS to CA in the south, and AB to QC in the north.

268.5 ***Carpatolechia notatella* (pictured)** (Hübner, [1813]). Two specimens in the CNC collected near Sherwood Park, on 16 Jun 2007 and 3 Jun 2008 by GR Pohl have been confirmed via barcoding.

346.5 *Sophronia primella* Busck, 1907. Known from AB (and Canada) from a single specimen in the CNC, collected at Lethbridge on 21 May 1938 by GS Walley. It was determined by RW Hodges.

Carpatolechia notatella
(Gelechiidae) Photo Greg Pohl



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Choreutidae:

PHOTO 400.5 *Choreutis pariana* (pictured) (Clerck, 1759). This species was recognised in AB by GG Anweiler, based on a specimen that he collected on a daisy flower in his yard in Edmonton on 23 September 2013. However, an older specimen has since been discovered in the CFS Northern Forestry Research Collection, collected 18 August 2004 by DA Macaulay. Known as the Apple and Thorn Skeletonizer, this fruit crop pest was introduced to North America. It was first found in NY in 1917, and then in Canada in BC in 1937 (Doganlar & Bierne 1981).



Daisy-loving *Choreutis pariana* (Choreutidae) collected in Edmonton in September, 2013.

Photo Gary Anweiler

Tortricidae:

453.5 *Agapeta zoegana* (Linnaeus, 1767). A specimen of this European biocontrol agent was collected by GR Pohl and Colin Deneka on 4 August 2012, at the Crandell Campground in Waterton Lakes National Park. This species was successfully brought to North America for biocontrol of knapweed (*Centaurea* spp.) (Weeden et al. 2003). It was released and became established in BC, and it is now quite common in the BC interior. According to Bourchier et al. (2002), 25 insects were released at an unreported locality in AB in 1989, but the species apparently failed to establish (that report was overlooked by Pohl et al. 2010). According to Rosemarie De Clerck-Floate (pers. comm.) that AB release was likely at Waterton. The 2012 specimen could represent previously undiscovered survival from that AB introduction, or it may be due to a range expansion from the successful populations in adjacent BC.

467.5 *Eana idahoensis* Obraztsov, 1963. According to JJ Dombroskie (unpublished data), most western Canadian material that was previously identified as *E. osseana* (Scopoli) is in fact this species. True *E. osseana* is known in AB only from Kakwa Wildland Park.

503.5 *Lozotaenia rindgei* Obraztsov, 1962. Although unpublished historical reports of this species in AB were actually misidentified *L. hesperia* Powell (Pohl et al. 2010), a specimen in the CNC from Lake Louise is correctly identified as *L. rindgei*.

518.5 *Sparganothis boweri* Powell & Brown, 2012. This species was recently recognised and described as distinct from *S. xanthoides* (Walker). Powell & Brown (2012) report the species in AB from Nordegg to Onefour, and east to NS and south to CO.

521.1 *Sparganothis senecionana* (Walsingham, 1879). This species was reported from AB with no details provided, by Powell & Opler (2009). Because no voucher specimens were known to us at that time, it was listed as "unconfirmed" for AB by Pohl et al. (2011). Powell & Brown (2012) include a locality from the Waterton area on their range map for this species, so we now accept it as confirmed for the province. They report it from southeastern BC and southwestern AB south to AZ and Baja California.

521.5 *Sparganothis umbrana* Barnes & Busck, 1920. Powell & Brown (2012) report this species from the Onefour area of southern AB, south to CO and east to NF. ...continued

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638.5 *Eucosma cinereolineana* (Heinrich, 1923). This species was reported from AB (and Canada) by Wright (2013), based on two specimens in the CNC, collected at Onefour on 22 May 1982 by J-F Landry. Like all other "*Phaneta*" in North America, this species was moved from *Phaneta* to *Eucosma* by Gilligan et al. (2013).

646.5 *Eucosma pallidarcis* (Heinrich, 1923). Known in AB from a single specimen from Onefour, collected 12 July 1984 at blacklight by J-F Landry (determined via dissection by DJ Wright, slide TOR1750; CNC). The species is also known from BC and MB.

648.5 *Eucosma salmicolorana* (Heinrich, 1923). Known from AB from a specimen in the CNC collected at Onefour at blacklight by J-F Landry on 3 August 1983 (determined via dissection by DJ Wright). As well, CD Bird collected a specimen near Nevis on 16 July 2003 that he identified as likely this species, but that has not been confirmed via dissection.

699.5 *Pelochrista metariana* (Heinrich, 1923). Known in AB from a specimen in the CNC collected at Sandy Point by J-F Landry in 1985.

Pyralidae:

880.5 *Pima occidentalis* Heinrich, 1956. Neunzig (2003) did not report any Canadian specimens of this western species when he raised it from synonymy with *P. albiplagiata* (Packard). However, there are numerous western Canadian specimens in the CNC, including material from Onefour and Manyberries.

Crambidae:

1044.5 *Udea turmalis* (Grote, 1881). This species is known in AB from a specimen in the CNC collected at Lake Louise on 20 July 1950 by DF Hardwick. It is a cordilleran species known also from BC and MT, south to NM and AZ (Munroe 1966).

1050.5 *Palpita quadristigmalis* (Guenée, 1854). A specimen of this species was taken in Medicine Hat by J Scott, on 27 August 2012; it was one of several individuals she saw there. This is a remarkable range extension; this very distinctive species is otherwise known only as far west as ON in Canada, and as far north as CO in the western USA.

1050.7 *Palpita magniferalis* (Walker, 1861). Known as the Ash Leafroller, a specimen of this species was collected in Medicine Hat by J Scott, on 13 May 2012. It was previously known across eastern Canada, only as far west as SK.

Geometridae:

1315.1 *Orthonama centrostrigaria* (Wollaston, 1858) – A lone specimen of this "expected" species was collected at an MV sheet on June 24, 2012 at Writing On Stone Provincial Park by DA Macaulay and family. The tattered specimen was collected in the campground area alongside a cottonwood poplar grove. The moth was previously known from both BC and SK.

1490.1 *Pero mizon* Rindge, 1955. A series of this "expected" species was collected in Waterton Lakes National Park on July 26 2012 by DA Macaulay at an MV sheet trap near the townsite. This species was previously known from BC.

1531.5 *Sabulodes edwardsata* (Hulst, 1886). A specimen of this western species was taken at the Crandell Campground in Waterton Lakes National Park by Ted Pike. It was collected in 2011, but just recently identified. It was previously known from adjacent BC.

Saturniidae:

1542.1 *Actias luna* (Linnaeus, 1758). As reported in the Fall 2012 ALG News (Pohl & Buck 2012), Luna moths were spectacularly discovered in the Fort McMurray area.

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...At least three different individual moths were observed and photographed by at least 5 different people in 2012. This represents a range extension from Big River SK, the previous western limit of known distribution. More recently, this past summer a specimen was seen on 25 June 2013, near Fort McKay by Julia Burger, confirming ongoing survival of the population in the area.

Notodontidae:

1591.1 *Schizura concinna* (Smith, 1797) – This "expected" species was collected at Wainwright Dunes Ecological Reserve on June 29, 2013 by DA Macaulay and family. It was previously known from both SK and BC, and is a common fruit pest elsewhere in Canada (Belton 1988). The lone specimen was collected in a UV trap amongst sand dunes and aspen bluffs.

Erebidae:

1603.1 *Orgyia pseudotsugata* (pictured) (McDunnough, 1921). Reported as "probable" for AB by Pohl et al. (2010), a specimen was photographed in Calgary in September 2012 by Ian Maton. The identity was confirmed from the photograph by BC Schmidt.

1678.1 *Hypena scabra* (pictured) (Fabricius, 1798). This species was reported from AB by Troubridge & Lafontaine (2003), but was listed as "probable" for AB by Pohl et al. (2010) because no confirmed records could be located west of SK. In 2012, Bruce Christensen collected the first confirmed AB specimen, at Fawcett.

1686.1 *Tathorhynchus exsiccata* (pictured, next page) (Lederer, 1855). A specimen of this species was taken in Medicine Hat on 27 July 2012, by J Scott. It was previously listed as "probable" for AB but known only as far west as SK.

1689 *Bulia deducta* (Morrison, 1875). This species was listed as "unconfirmed" for AB by Pohl et al. (2010). It had been reported on early AB lists by Dod (1915) and Bowman (1919, 1951), but no vouchers could be located. An old AB specimen of this species has now been found in the CNC. It was collected by FH Wolley Dod on 8 July 1909, on his homestead near Calgary, at the head of Pine Creek. The label further reads "coolie north of buildings, treacle [moth bait]".

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Above: *Orgyia pseudotsugata*
(photo: Ian Manton),
Below: *Hypena scabra*
(photo Bruce Christensen)



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Tathorhynchus exsiccata fresh off the spreading board! Photo Jan Scott

Noctuidae:

1758.5 *Syngrapha celsa* (Edwards, 1881). A specimen of this cordilleran species was documented recently in the CNC, from Saskatchewan Crossing in Banff National Park. The species is known throughout the Pacific Northwest from BC to CA, and east to NM (Lafontaine & Poole 1991).

1788.05 *Acronicta mansueta* (Smith, 1897). AB records of the species *A. falcata* (Grote) have been corrected recently to *A. mansueta* by GG Anweiler. The latter is an addition to the AB list.

1801.5 *Agriopodes geminata* (Smith, 1903). This species was collected at Wainwright Dunes on June 28, 2013 by DA Macaulay and family. Its identity was confirmed by GG Anweiler, extending the western range limits of this species from central SK.

1909.5 *Phlogophora iris* Guenée, 1852. This species was collected recently on June 28 2013 at an MV sheet trap in AB by DA Macaulay and family. The lone specimen was found in the Wainwright Dunes Ecological Reserve. It was previously known in eastern Canada, only as far west as SK.

2039.5 *Ufeus hulstii* Smith, 1908. AB records previously identified as *U. plicatus* Grote, have been redetermined as *U. hulstii* (Lafontaine & Walsh 2013). It occurs in western North America from AK to Mexico.

Other significant AB records:

Sesiidae:

369 *Paranthrene tabaniformis* (Rottemburg). Second confirmed record and locality for AB. GG Anweiler collected four specimens in a pheromone trap southeast of Sherwood Park, between 20 and 27 June 2012.

Hesperiidae:

1086 *Euphyes vestris* (Boisduval, 1852). This species was previously known as a stray in AB based on a specimen collected by CD Bird near Erskine in 1999. A second AB specimen was collected by Mary Roy on 3 August 2013 at Sittingstone Lake, near Bashaw. Like *Poanes hobomok* (Harris), this species appears to be expanding its range westward (Pohl et al. 2010).

Nymphalidae:

1193 *Polygonia interrogationis* (pictured, next page) (Fabricius). Long known in AB from a single stray specimen collected many years ago near Lloydminster, several specimens turned up in 2012, which was a banner year generally for migrating and stray butterflies. A specimen was photographed in Calgary on 1 July 2012 by Ian Maton.

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Polygonia interrogationis???

...Why yes, it is a question mark, photographed in Calgary.

Photo Ian Manton

...Later, four specimens turned up in Jan Scott's bait trap in Medicine Hat, one each on 15 and 17 August 2012, and two on 21 August. Additionally, a dead specimen was found on a sidewalk near the University of Alberta campus in Edmonton by Collin Cupido on 14 August 2012. That specimen may have been road kill that originated elsewhere, but it was very fresh and likely came from AB.

Sphingidae:

1567 *Proserpinus flavofasciata* (pictured)

(Walker). A specimen of this rarely-collected species was taken at the Devonian Botanical Gardens, near Devon on 4 June 2013, by John Acorn. Several wandering larvae were also found near Half Moon Lake (20 km southeast of Edmonton) at about the same time, one of which was identified by GGA and Chris Schmidt from a submitted image.

Noctuidae:

1734 *Megalographa biloba* (Stephens). New early record for this rarely collected species; Ian Maton photographed one in Calgary on 26 June 2012.

1766 *Deltote bellicula* (Hübner). Range extension from central AB to the Fort McMurray area, photographed in 2012 by Jeremy Gatten. This represents a northern range extension for this bog species; it is probably more widely distributed in the north.

1815 *Amphipyra pyramidoides* Guenée. A specimen collected in Edmonton on 18 October 2013 by GG Anweiler is a significant range extension; this species is otherwise known in AB only from the south, about as far north as Dinosaur Provincial Park.

Additions to the Excluded Taxa List:

Crambidae:

E40.5 *Anania coronata* (Hufnagel, 1797). North American material reported under this name is now recognised as a distinct species, *A. tertialis* (Guenée) (Yang et al. 2012). True *A. coronata* is restricted to the Old World. ...continued

Proserpinus flavofasciata is usually quite rare in Alberta. This individual was captured at the Devonian Botanical Gardens by John and Gary.
Photo John Acorn



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Geometridae:

E77.5 *Eupithecia helena* Taylor, 1906. This species was accidentally listed for AB in the Lepidopterists' Society 2008 Season Summary (Tuttle 2009). A new AB record for "*Macaria helena* (Cassino)" was submitted, and this was erroneously changed in Tuttle (2009) to "*Eupithecia helena*" rather than to "*Speranza helena*", the correct species name.

E89.5 *Digrammia hebetata* (Hulst, 1881). Historical reports of this species from Canada, including reports by Bowman (1951) and McGuffin (1972), represent a previous taxonomic concept. These records actually refer to *D. rippertaria* (Duponchel). True *D. hebetata* occurs only in southwestern USA (Ferguson 2008).

E92.5 *Iridopsis emasculatum* (Dyar, 1904). The report of this species from AB by Bowman (1951) is incorrect. Those records actually refer to *I. larvaria* (Guenée). *Iridopsis emasculatum* is a strictly western species that does not occur as far east as AB.

E99.5 *Speranza coloradensis* (Hulst, 1896). This species was accidentally listed for AB in the Lepidopterists' Society 2006 Season Summary (Tuttle 2007). A new AB record for "*Eupithecia coloradensis* (Hulst)" was submitted, and this was erroneously changed in Tuttle (2007) to "*Macaria coloradensis*" (now placed in the genus *Speranza*).

E101.5 *Speranza sulphurea* (Packard, 1873). This species has been reported in error in early AB lists from Dod (1906) to Bowman (1951), as well as by McGuffin (1972) and Troubridge & Lafontaine (2003), based on a previous taxonomic concept. Western material is actually *S. amboflava* (Ferguson), which was described as a race of *S. sulphurea* but later elevated to species level by Ferguson (1983).

Noctuidae:

E117.5 *Allagrapha aerea* (Hübner, [1803]). This species was reported by Forbes (1954) from "Nova Scotia and southern Canada to the Gulf Strip, west to Alberta and New Mexico". In their revision of the subfamily, Lafontaine & Poole (1991) report this species only from eastern North America, as far north as southern ON and QC, and with records only as far northwest as NE, SD and southern MN. The species is easily confused with *Diachrysia aereoides* (Grote), which does occur across southern Canada. In the absence of any vouchers, it is assumed that Forbes' western records are actually that species.

E120.5 *Acrionicta falcula* (Grote, 1877). This species (#1788) is hereby moved from the AB list to the Excluded Species list. AB specimens previously identified as this species, have been redetermined as *A. mansueta* (Smith). True *A. falcula* occurs only as far west as MB (GG Anweiler, unpublished data).

E129.5 *Sympistis nigrita* (Boisduval, 1840). Lafontaine & Schmidt (2013) recognised *S. zetterstedtii* (Staudinger) as a full species, distinct from *S. nigrita*. Thus the latter is rendered strictly Palaearctic, and is hereby added to the Excluded Species list.

E156.05 *Lithophane antennata* (Walker, 1858). This eastern pest of apple was reported by Belton (1988) from AB as follows: "A large population increase was reported in ALTA in the early 1980s and apple was attacked." It must have been confused with *L. georgii* Grote (a similar pest of fruit crops that does occur in western Canada), or "ALTA" was reported in error. *Lithophane antennata* has never been found west of MB.

E166.5 *Ufeus plicatus* Grote, 1873. This species (#2039) is hereby moved from the AB list to the Excluded Species list. AB records previously identified as *U. plicatus* have been redetermined as *U. hulstii* Smith (Lafontaine & Walsh 2013). *Ufeus plicatus* is a rare species of eastern North America, known only as far west as NE.

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Errata:

p. 105, #499 *Archips purpurana* (Clemens, 1865). The common name of this species was erroneously listed as the Omnivorous Leafroller; that was incorrect, that name applies to *Platynota stultana* Walsingham.

p. 200, #1299 *Xanthorhoe delectaria* Cassino & Swett, 1920. Year of publication corrected from 1922.

p. 383, note for #1436 *Digrammia rippertaria* (Duponchel, 1830). In the original note on this species, the taxon *D. hebetata* (Hulst) was mentioned as a synonym of this species. That is not correct. The note should read: "Canadian material was previously known under the name *Semiothisa* (= *Digrammia*) *hebetata* (Hulst), but that species is restricted to swUSA. Ferguson (2008) clarified the divisions between these species."

p. 383, note for #1453 *Iridopsis larvaria* (Guenée, [1858]). In the original note on this species, the taxon *I. emasculatum* (Dyar) was mentioned as a synonym of this species, following McGuffin (1977). That is no longer correct. The note should read: "The report by Bowman (1951) of *I. emasculatum* in AB is referable to *I. larvaria* as well; *I. emasculatum* is a closely related western species that does not occur in AB."

Significant taxonomic changes:

Tortricidae:

Several species have been moved from *Platphalonidia* to *Platphalonia* by Metzler & Albu (2013). This includes the AB species #449 *Platphalonia alberta* (Razowski), #450 *Platphalonia dangi* (Razowski); and #453 *Platphalonia lavana* (Busck).

The genus *Archepandemis* (including #500 *A. borealis* (Freeman) and #501 *A. coniferana* Mutuura) has been synonymized with *Pandemis* by Dombroskie & Sperling (2013).

Several Sparganothini species have been moved from *Sparganothis* to *Cenopsis* following revival of the latter genus by Powell & Brown (2012). The AB species affected are #522 *Cenopsis reticulatana* (Clemens) and #522.1 *Cenopsis directana* (Walker).

All North American members of the genus *Phaneta* have been transferred to *Eucosma* by Gilligan et al. (2013). This affects all species from #615 to #654. As well, several *Eucosma* species were placed in a separate genus *Eucopina* by Gilligan et al. (2013). This affects the AB species #673 *Eucopina rescissoriana* (Heinrich).

The taxon *Epinotia criddleana* (Kearfott) was synonymized by Mutanen et al. (2012) as part of the recently reinstated Holarctic species *E. cinereana* (Haworth, 1811). *E. cinereana* was previously thought to be a European synonym of *E. nisella* (Clerck).

Crambidae:

North American material previously recognised as #1013 *Anania coronata* (Hufnagel), has been recognised to comprise three cryptic species, none of which are true *A. coronata* (Yang et al. 2012). The latter is restricted to the Palearctic and was added to the Excluded Species list above. All AB material is now known as *A. tertialis* (Guenée, 1854). The other recently recognised Nearctic species, *A. plectilis* (Grote & Robinson) and *A. tennesseensis* Yang, do not occur in AB.

Erebidae:

Lafontaine & Schmidt (2013) made several changes to the higher taxonomy within Erebidae. Species #1683 *Mycterophora inexplicata* (Walker) is now placed in the tribe Boletobiini, in subfamily Boletobiinae.

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...The subfamily Phytometrinae (including species #1684 *Spargaloma sexpunctata* Grote) is now considered a tribe Phytometrini in the subfamily Boletobiinae. The tribe Toxocampini (including #1686 *Lygephila victoria* (Grote) and #1686.1 *Tathorhynchus exsiccata* (Lederer)) is raised to subfamily status, preceding Erebiniae. The tribe Ophiusiini (including all species in the genus *Zale*, #1701.1 to 1704) is synonymized with Omopterini.

The AB species previously known as #1662 *Zanclognatha litalba* (Smith), and the species *Z. bryanti* Barnes (not in AB) were relegated to subspecies of *Z. jacchusalis* (Walker, 1859) by Lafontaine & Schmidt (2013).

The species previously known in AB as #1663 *Chytolita petrealis* (Grote) was synonymized by Crabo et al. (2013) to *Chytolita morbidalis* (Guenée, 1854).

Noctuidae:

Lafontaine & Schmidt (2013) corrected the subfamily Dilobinae (including #1778 *Raphia frater* Grote) to Raphiinae. They also elevated #1863 *Sympistis nigrita zetterstedtii* (Staudinger, 1857) to full species status. Thus *S. zetterstedtii* becomes the North American species, and *S. nigrita* is rendered strictly Palaearctic and is added to the Excluded Species list above.

Lafontaine & Schmidt (2013) also transferred #1880 *Schinia nuchalis* and the Palaearctic *S. scutosa* (#E134), to the genus *Protoschinia*.

Crabo et al. (2013) synonymized #1967 *Hydraecia pallescens* Smith with *H. medialis* (Smith, 1892).

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Collin Cupido and Dave Lawrie provided information on the Edmonton *Polygonia interrogationis* record. Rosemarie De Clerck-Floate and Rob Bouchier provided information on *Agapeta zoegana*. Chris Schmidt, Don Lafontaine, and Jason Dombroskie confirmed identifications. John Acorn, Julia Burger, Bruce Christensen, Colin Deneka, Jason Dombroskie, Jeremy Gatten, Sangmi Lee, Ted Pike, Mary Roy provided specimen records and information.

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Some more favorite lep photos from 2013. Clockwise from top: a Lycaenid makes a lepidopterous lunch for a crab spider (Gary Anweiler), *Pieris oleracea* (Gary Anweiler), *Papilio canadensis* nectaring (Annie Pang), and *Lycaena helloides* & *Xylena curvimaculata* (Gary Anweiler).



Last, but not least... The 2013 Alberta Butterfly Big Year Contest Winners!

Greg Pohl, Doug Macaulay, and Rob Hughes



This past summer, ALG and eButterfly hosted the first ever Alberta Butterfly Big Year (BBY) contest, to see who could record the most species. The rules were simple: observe, photograph, and/or collect wild butterflies in Alberta, report your observations to the eButterfly website, and then submit your species list to us (the BBY committee made up of Rob Hughes, Doug Macaulay, and Greg Pohl). **And the winner of the 2013 contest is Dave Lawrie, of Edmonton, with an impressive 43 species.** And hot on his heels was Colleen Raymond who comes in second with 41 species.

Dave wins a commissioned piece of original butterfly art from local artist Charity Dakin - she'll create a custom work based on Dave's subject matter suggestions (see Charity's art at <http://charitydakinefineartstudioonline.com/>). As a runner-up, Colleen will also receive a prize, kindly supplied by our president John Acorn.

Unfortunately, we didn't receive very many entries. Maybe it was because many of you figured you didn't have enough records to have much of a chance of winning. However, this is not true at all. For example, one member while pushing a stroller and corralling a five year old managed to record 34 species randomly during a series of hikes and camping trips over the summer.

Despite the low number of entries, eButterfly received an impressive 1063 Alberta records this past summer, almost twice as many as last year, so it seems the contest has motivated Albertans to contribute their observations. And we bet many of them would have given Dave and Colleen some pretty tough competition.



Photos submitted by Dave Lawrie and Colleen Raymond. Clockwise from top left: *Strymon melinus* and *Boloria chariclea* (Dave), *Enodia anthedon*, *Polygonia satyrus*, and *Lycaena dione* (Colleen).