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## A Checklist of the Moths of Alaska

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### Abstract

This article represents the first published complete checklist of the moth taxa, resident and occasional, recorded to date for Alaska. Seven-hundred and ten species are listed. General species distribution ranges within the state are included. Three North American records are listed for the first time: *Cydia cornucopiae* (Tengström); *Eucosma hohenwartiana* ([D. & S.]); *Acronicta menyanthidis* (Vieweg).

**Key words:** Alaska, checklist, Lepidoptera, moths, North America

### Introduction

The Lepidopteran fauna in Alaska is poorly documented in the literature and most reports are devoted to butterflies, which to many collectors are more charismatic than moths. Whereas butterflies are generally easily visible, many of the moth species are very small, secretive, and cryptically marked, and thus easily overlooked in the field. Additionally moths have been traditionally hard to identify, but that situation is changing now with the advent of various web sites and publication of new books. In most areas of the state, except for very early and very late in the season, blacklighting is not generally possible because of the long photoperiod south of the Arctic Circle, and twenty-four hour daylight northward. In the extreme southern portion and in the panhandle, blacklighting is possible for a few hours each night during the summer, weather permitting, if the lights are placed in shaded locations. Pheromone traps are effective for collecting some species, but have the disadvantage that only males are attracted. Consequently most collecting is by hand net and frequently requires beating the brush to disturb resting individuals. A few species visit flowers, where they are clearly visible. Other species fly rapidly over rock slides and scree slopes, but are not easily seen and even less easily collected. This situation most probably accounts for the paucity of Microlepidoptera records, where only the Tortricidae have been collected intensively. Based on the geographic size and vegetative diversity of the state, one would expect to find numerous microlepidopteran species, especially members of the Gelechioidea. To date, 710 species have been recorded from the state. Based on projections made by several lepidopterists, including an author of this paper (JDL), in a given region moth species outnumber butterfly species by a factor of 15–20:1. There are 84 butterfly species currently recorded for Alaska,

which gives a projected 1260–1680 number for moth species. Thus in all probability the current list represents about half of the moth species that occur in Alaska.

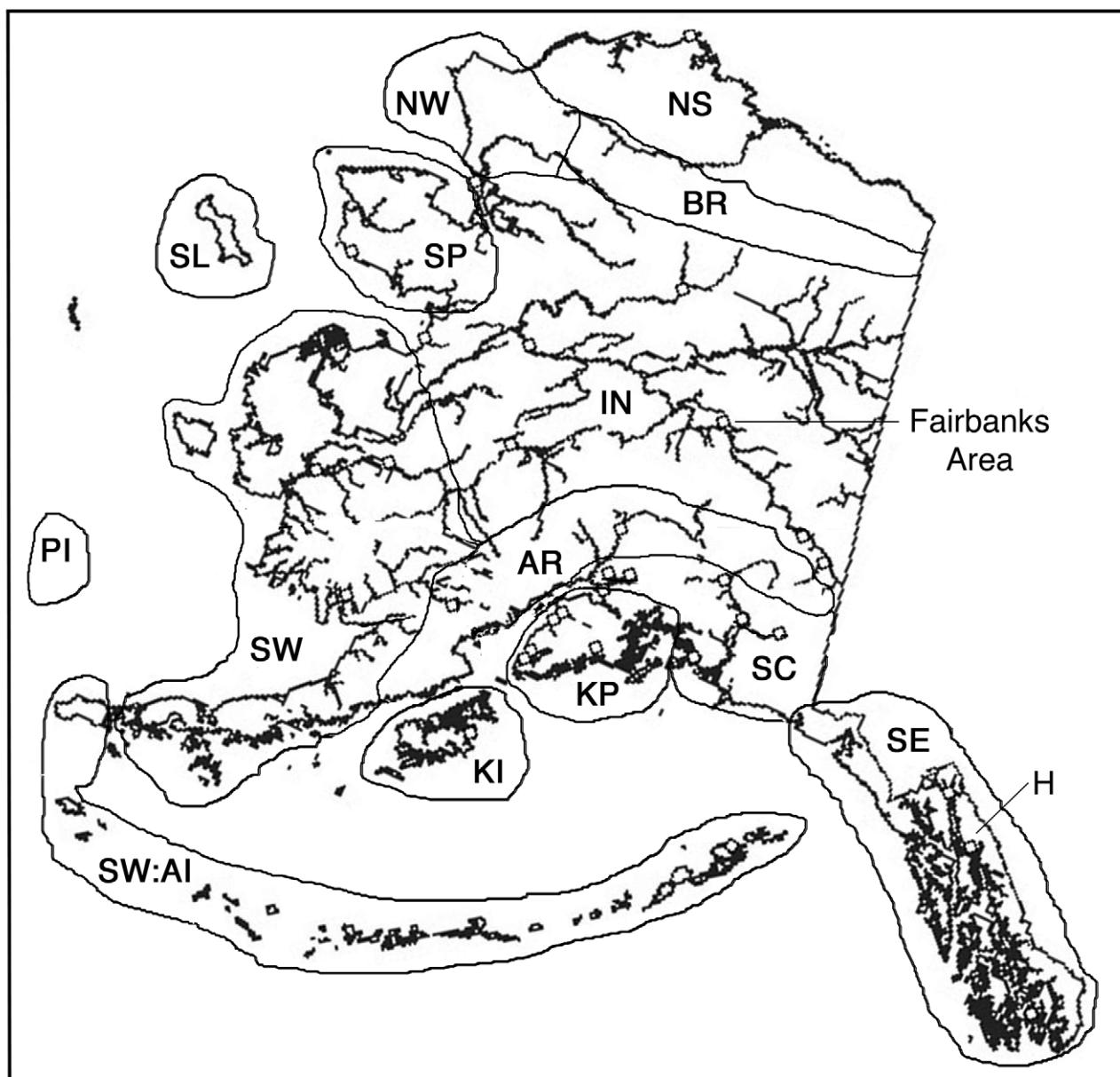
**Data sources:** The list that follows documents the known moth species for which we have been able to verify records. Various literature sources appear to have listed “Alaska” for some species based upon a range projection rather than hard data; such species are excluded here. In addition to our own extensive collecting (C. D. Ferris collection, Laramie, WY; K. W. Philip – ALS Collection, Fairbanks, AK), our sources include museum records, literature records, and information from many specialists who work on individual moth families. These sources include: Alaska Lepidoptera Survey (ALS); Alaska Reference Collection System (ARCS), USDA Forest Service, (Fairbanks, Anchorage, Juneau), AK; American Museum of Natural History (AMNH), New York, NY; Essig Museum of Entomology (EME), University of California, Berkeley, CA; Oregon State University collection (OSU), Corvallis, OR; National Museum of Natural History, Smithsonian Institution (USNM), Washington, DC; University of Alaska Museum (UAM), Fairbanks, AK; University of Alberta, Strickland Museum (UASM), Edmonton, Alberta, Canada; Canadian National Collection of Insects, Arachnids, and Nematodes (CNC), Ottawa, Ontario, Canada; fascicles from The Moths of America North of Mexico, R. W. Hodges, Editor-in-Chief, published by The Wedge Entomological Research Foundation (1972–2009); Landolt, *et al.* (2007); G. G. Anweiler, Edmonton, Alberta, Canada; C. D. Bird, Erskine, Alberta, Canada; Matt Bowser, Soldotna, AK; J. W. Brown (USNM), Washington, DC; R. L. Brown, Mississippi State, MS; Dominique Collet, Sterling, AK; C. V. Covell, Jr., Gainesville, FL; Lars Crabo, Bellingham, WA; D. R. Davis (USNM), Washington, DC; J. Dombroskie, Ithaca, NY; P. Gentili-Poole (USNM), Washington, DC; Matt Goff, Sitka, AK; J. B. Heppner, Gainesville, FL; R. W. Hodges, Eugene, OR; Lauri Kaila, Helsinki, Finland; Bernard Landry, Geneva, Switzerland; J-F Landry (CNC), Ottawa, Ontario, Canada; Lisa Lumley, Laurentian Forestry Centre, Quebec, Canada; Deborah Matthews Lott, Gainesville, FL; T. L. McCabe, Albany, NY; Hugh McGuinness, Sag Harbor, NY; P. A. Opler, Ft. Collins, CO; G. R. Pohl, Sherwood Park, Alberta, Canada; J. A. Powell (EME), Berkeley, CA; M. A. Quinn, Austin, TX; S. Rab Green (AMNH) New York, NY; John E. Rawlins (CMNH) Pittsburgh, PA; J. Razowski, Krakow, Poland; B. C. Schmidt (CNC), Ottawa, Ontario, Canada; S. Y. Sinev, St. Petersburg, Russia; Joel Szymczyk, Lewisberry, PA; D. L. Wagner, Storrs, CT.

**Specimen depositories:** We have not made any attempt to list all of the locations where voucher specimens are placed, but we have attempted to list at least one depository. Immediately following each species entry there appears a number inclosed within boldface square brackets that indicates one or more depositories. The depository key is: [1] Alaska Lepidoptera Survey (ALS) collection, Fairbanks, AK; [2] C. D. Ferris collection, Laramie, WY; [3] University of Alaska Museum, Fairbanks, AK; [4] Alaska Reference Collection System, USDA Forest Service, (Fairbanks, Anchorage, Juneau), AK; [5] American Museum of Natural History, New York, NY; [6] National Museum of Natural History, Smithsonian Institution, Washington, DC; [7] Canadian National Collection of Insects, Arachnids, and Nematodes, Ottawa, Ontario, Canada; [8] Essig Museum of Entomology, University of California, Berkeley, CA; [9] Nova Scotia Museum, Halifax, Nova Scotia, Canada; [10] Museum of Comparative Zoology, Cambridge, MA; [11] Natural History Museum of Los Angeles County, Los Angeles, CA; [12] Oregon State University Collection, Corvallis, OR; [13] USDA, ARS Yakima Agricultural Research Laboratory, Wapato, WA; [14] Kenai National Wildlife Refuge, Kenai, Alaska; [15] C. Howard Grisham collection, Huntsville, AL; [16] Alaska (Territorial) Museum, Juneau, AK. [17] California Academy of Sciences, San Francisco, CA; [18] Zoology Museum, Helsinki, Finland. [19] Lars Crabo collection, Bellingham, WA; [20] University of Alberta, Strickland Museum, Edmonton, Alberta, Canada; [21] University of California, Davis, CA; [22] Carnegie Museum of Natural History, Pittsburgh, PA; [23] Canadian Centre for DNA Barcoding, Biodiversity Institute of Ontario, University of Guelph, Guelph, Ontario, Canada. The few instances where depositories are unknown are indicated by [?].

**Organization:** The arrangement of the checklist is phylogenetic for the higher-level taxa, whereas the genera/species are listed alphabetically. The general arrangement of the Microlepidoptera follows the order in Kristensen [1998]. The Tortricidae, Pyraloidea, Pterophoroidea, and Noctuoidea entries follow the respective arrangements by Brown (2005), Munroe & Solis [1998], Gielis (2003), and Lafontaine & Schmidt (2010). Additional information is to be found in Van Nieurerken *et al.* (2011). Recent synonymizations are entered as offset italic entries. The numbers in parentheses immediately to the right of the family names indicate the number of associated taxa. In several instances, a genus is cited without a species name. These entries relate to specimens that have been either barcoded or dissected, but the preparations could not be matched to described species for which genitalia illustrations are available. They may represent undescribed species, or Beringian species that lack full coverage

with genitalia illustrations in the available literature. These entries are additional but unknown species. The explanatory footnotes appear after the checklist.

**Locality abbreviations:** Alaska has been divided into the zones shown in Fig. 1. The following abbreviations are used in the checklist: AR = Alaska Range; BR = Brooks Range; H = Haines area; GB = Goldstream Bog nr. Fairbanks; IN = Interior Alaska; KI = Kodiak Island; KP = Kenai Peninsula; NS = North Slope; NW = Northwest Alaska; PI = Pribilof Islands; SC = Southcentral Alaska; SE = Southeast Alaska; SL = St. Lawrence Island; SP = Seward Peninsula; SW = Southwest Alaska; SW:AI = Aleutian Islands. Not shown on map: BC = Bonanza Creek State Forest Area, near Fairbanks; GB = Goldstream Bog nr Fairbanks; MD = Murphy Dome (near Fairbanks). Old records that cite "McKinley N.P." or Mt. McKinley N.P." have been updated to the current name: Denali National Park & Preserve and shown as Denali NPP. The communities of McKinley Park and McKinley Village have not undergone name changes. A community of Denali exists some distance SE of the Park. In some instances, only one locality is known, and that is shown without a zone designation.



**FIGURE 1.** Map of Alaska, showing zones treated in this paper. AR = Alaska Range; BR = Brooks Range; H = Haines area; GB = Goldstream Bog nr. Fairbanks; IN = Interior Alaska; KI = Kodiak Island; KP = Kenai Peninsula; NS = North Slope; NW = Northwest Alaska; PI = Pribilof Islands; SC = Southcentral Alaska; SE = Southeast Alaska; SL = St. Lawrence Island; SP = Seward Peninsula; SW = Southwest Alaska; SW:AI = Aleutian Islands. Not shown on map: BC = Bonanza Creek State Forest Area, near Fairbanks; GB = Goldstream Bog nr Fairbanks; MD = Murphy Dome (near Fairbanks).

## CHECKLIST

### ERIOCRANIIDAE (2)

**Eriocrania breviapex** Davis [6]

KP

**Eriocrania semipupurella pacifica** Davis [6]

KP; Third Judicial District, Seward

### HEPIALIDAE (4)

**Gazoryctra confusus** (Hy. Edw.) [6, 7]

KP; Latouche; Mt. Dewey; Sitka

**Gazoryctra novigannus** (B. & Benj.) [1]

IN

**Gazoryctra roseicaput** (N. & D.) [1, 2]

KP; SW:AI; Cordova; Mt. Dewey

**Sthenopis purpurascens** (Pack.) [1, 3, 5, 10]

SC; SW:AI (Kasatochi Is.); Ft. Richardson; King Salmon; Palmer; Valdez; Wasilla

### NEPTICULIDAE (1)

**Ectoedemia** species [23]

KP

### ADELIDAE (2)

**Adela purpurea** Wlk. [1]

IN

**Nemophora bellela** (Wlk.) [1, 8]

IN; 7 mi SE & 17 mi SW of Cantwell; 63 mi NE Fox; Unalakleet

### INCURVARIIDAE (2)

**Greyia punctiferella** (Wlsm.) [6]

SE; Yakutat

**Greyia variabilis** Davis & Pellmyr [1, 7, 8]

AR; IN; NS; NW; PI; SP; SW; Cape Thompson; Denali Hwy, mi 32; Nome; St. George Is.; St. Paul Is., Umiat

### TINEIDAE (6)

**Monopis monachella** (Hbn.) [6]

IN; Ft. Yukon

**Monopis rusticella** (Hbn.) [6]

“Alaska”

**Monopis spilotella** Tengström [6]

BR; IN; SC; Anaktuvuk Pass; Ft. Yukon; Matanuska; Nulato; Rampart

**Nemapogon ? granella** L. [4]

SC; Anchorage

**Nemapogon tylodes** (Meyr.) [9]

IN; Fairbanks

**Tinea pellionella** (L.) [4]

SC; Anchorage

### BUCCALATRICIDAE (1)

**Bucculatrix frigida** Deschka [3]

SC; Palmer

### GRACILLARIIDAE (12)

**Caloptilia alnivorella** (Cham.) [4]

IN; Fairbanks; Eielson Air Force Base

**Caloptilia strictella** (Wlk.) [1]

IN

**Caloptilia** species [23]

KP

**Micrurapteryx salicifoliella** (Cham.) [3, 4, 7]

BC; IN; Circle City; Fairbanks; Kandik R.

**Parectopa albicostella** Braun [23]

KP

<b>Phyllocnistis populiella</b> (Cham.) [1, 3, 23]	IN; KP; Fairbanks
<b>Phyllonorycter alaskana</b> Deschka [?]	SC; 8 mi N of Palmer
<b>Phyllonorycter apparella</b> (H.-S.) [4, 6, 23] = <i>P. ontario</i> (Free.)	BC; IN; KP; SC; Cooper Landing; Delta Jct.; Fairbanks
<b>Phyllonorycter erugatus</b> Davis [6]	H (20 km north)
<b>Phyllonorycter nipigon</b> (Free.) [6]	IN; Delta Jct.; 10 mi SW of Fairbanks
<b>Phyllonorycter scudderella</b> (F. & B.) [6]	IN; Delta Jct.
<b>Phyllonorycter tremuloidiella</b> (Braun) [4]	BC

### YPONOMEUTIDAE (3)

<b>Ocnerostoma</b> species [4]	SC; Anchorage
<b>Swammerdamia caesiella</b> (Hbn.) [14, 23]	KP
<b>Zelleria</b> species [4]	SC; Anchorage

### ARGYRESTHIIDAE (6)

<b>Argyresthia calliphanes</b> Meyr. [4]	SC; Anchorage. <b>Note 1</b>
<b>Argyresthia goedartella</b> (L.) [4]	SC; Cooper Landing; Anchorage
<b>Argyresthia pygmaeella</b> (Hbn.) [4, 7]	BC; Anchorage; Fairbanks; Moraine Lake
<b>Argyresthia tsuga</b> Free. [4]	Prince of Wales Is.
<b>Argyresthia</b> species 1 [23]	KP
<b>Argyresthia</b> species 2 [23]	KP

### PLUTELLIDAE (3)

<b>Plutella xylostella</b> (L.) [4]	SC; Anchorage
<b>Rhigognostis interrupta</b> (Wlsm.) [7, 14, 23]	KP; Unalakleet
<b>Rhigognostis senilella</b> (Zett.) [7]	KP; Cooper Landing

### GLYPHIPTERIGIDAE (1)

<b>Glyptipterix sistes</b> sistes (Heppner) [6, 7]	SC; SE; Ketchikan; Matanuska
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### YPSOLOPHIDAE (1)

<b>Ypsolopha dentella</b> (F.) [3, 4]	SC; Anchorage
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### LYONETIIDAE (1)

<b>Lyonetia saliciella</b> Bsk. [4, 7]	KP; Seward
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### OECOPHORIDAE (4)

<b>Endrosis sarcitrella</b> (L.) [4]	SE; Juneau
<b>Hofmannophila pseudospretella</b> (Staint.) [?]	PI (an anthropophilic pest species)
<b>Martyrhilda ciniflonella</b> (L. & Z.) [1, 4]	IN; AR; BC; Anchorage; College; Fairbanks; Nushagak River
<b>Polix coloradella</b> (Wlsm.) [1]	AR

### ELACHISTIDAE (11)

<b>Agonopterix aff. arnicella</b> (Wlsm.) [1]	IN
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<b>Agonopterix canadensis</b> (Bsk.) [4]	SC; Anchorage
<b>Agonopterix gelidella</b> (Bsk.) [1]	IN
<b>Agonopterix rosaciliella</b> (Bsk.) [6]	West-central Alaska eastward
<b>Elachista alpinella</b> Staint. [7]	SW:AI; Cold Bay
<b>Elachista dagnirella</b> Kaila [8]	SC; Anchorage; 10 mi SE of Houston
<b>Elachista excelsicola</b> Braun [8]	AR; IN; 4 mi N Cantwell; Eagle Summit
<b>Elachista olorinella</b> Kaila [7]	IN; Unalakleet
<b>Elachista orestella</b> Kaila [6]	IN; KI; Afognak Is.; Ft. Yukon
<b>Elachista zernyi</b> Hartig [8]	IN; SC; Anchorage; Cantwell area (7 mi SE, 17 mi SW, 4 mi N)
<b>Semioscopis inornata</b> Wlsm. [1, 3]	AR; H

#### COLEOPHORIDAE (9)

<b>Coleophora elaeagnisella</b> Kft. [7]	IN; Fairbanks
<b>Coleophora ledi</b> Staint. [8]	IN; 7 mi SW Ester
<b>Coleophora mayrella</b> (Hbn.) [8]	SC; Anchorage
<b>Coleophora pruniella</b> Clem. [7]	SW; Naknek River; King Salmon
<b>Coleophora rosaevorella</b> McD. [7]	IN; Fairbanks
<b>Coleophora sparsiatomella</b> McD. [7]	IN; Fairbanks
<b>Coleophora sparsipulvella</b> Cham. [7]	IN; Fairbanks
<b>Coleophora</b> species 1 [23]	KP
<b>Coleophora</b> species 2 [7]	IN; Fairbanks

#### MOMPHIDAE (5)

<b>Mompha albapalpella</b> (Cham.) [7]	IN; Unalakleet
<b>Mompha idaei</b> (Zell.) [7]	SC; Talkeetna Mts.
<b>Mompha sexstrigella</b> (Braun) [14, 23]	KP; near Ohmer Lake; Sterling
<b>Mompha unifasciella</b> (Cham.) [3]	SC; Palmer
<b>Mompha</b> species [1]	AR; IN

#### SCYTHRIDIDAE (2)

<b>Scythris immaculatella</b> Cham. [8]	IN; 7 mi SW of Ester
<b>Scythris</b> species [1]	IN

#### GELECHIIDAE (21)

<b>Anacampsis fragariella</b> Bsk. [?]	BC
<b>Bryotropha similis</b> (Staint.) [7, 8]	IN; SC; Vic. Cantwell; Fox; Houston; Unalakleet
<b>Carpatolechia proximella</b> (Hbn.)	
species complex [7, 23]	IN; KP; NW; Nogahabara dunes 65 mi N Galena
<b>Chionodes continuella</b> (Zell.) [6]	IN; Fairbanks; North Star; Steese Highway, 63 mi NE Fox
<b>Chionodes dolo</b> Hodges [2, 6, 7]	IN; NS; Eagle Summit; mi 250 Richardson Hwy; Unalakleet
<b>Chionodes fector</b> Hodges [6]	BR
<b>Chionodes fimus</b> Hodges [6]	NS; Schrader Lake; Sagwon; Prudhoe Bay
<b>Chionodes lugubrella</b> (F.) [2, 6, 8]	H; IN; 12 mi S of Anderson; Fairbanks; Rampart
<b>Chionodes occlusus</b> (Braun) [2]	H
<b>Chionodes permactus</b> (Braun) [7]	IN; Western Alaska; Unalakleet

<b>Chionodes psilopterus</b> (B. & Bsk.) [6]	IN; Ft. Yukon
<b>Chionodes sattleri</b> Hodges [6, 8]	IN; NS; Anderson; Cantwell, Schrader Lake
<b>Chionodes viduella</b> (F.) [6, 8]	AR; IN; NS; Denali NPP; Eagle Summit
<b>Filatima</b> species [7]	NW: Nogahabara Dunes
<b>Gnorimoschema alaskense</b> Povolny	PI; St. Paul Island. <b>Note 2</b>
<b>Gnorimoschema vastificum</b> Braun [7]	IN; NW; Nogahabara dunes 65 mi N Galen; Kobuk dunes 90 mi E Kotzebue
<b>Helcystogramma fernaldella</b> (Bsk.) [?]	IN; College
<b>Neofaculta infernella</b> (H.-S.) [7]	IN; mi 250 Richardson Hwy
<b>Prolita sexpunctella</b> (F.) [1, 23]	BR; KP
<b>Scrobipalpa</b> sp. nr. <b>murinella</b> (Duponchel) [23]	KP. Designation by Nazari and Landry (2012)
<b>Scrobipalpa atriplicella</b> (F. v. Röslerstamm) [?]	Alaska, localities not stated

## ALUCITIDAE (1)

**Alucita montana** B. & L. [1]

H

## PTEROPHORIDAE (10)

<b>Adaina montanus</b> (Wlsm.) [1]	H
<b>Amblyptilia pica</b> (Wlsm.) [4, 7]	KP; Sunrise
<b>Gillmeria pallidactyla</b> (Haw.) [7, 14]	KP; SP; Hope; Nome
<b>Hellinsia albilibatus</b> (McD.) [7]	IN; Unalakleet
<b>Oidaematophorus brucei</b> (Fern.) [2]	IN; NS (Galbraith Lake); SE; MP 312 Richardson Hwy; Nunatak
<b>Oidaematophorus cineraceus</b> (Fish) [1, 2]	H; IN; Fairbanks
<b>Oidaematophorus rogenhoferi</b> (Mann) [6] = <i>O. alaskensis</i> B. & L	IN; NS; Ruby
<b>Paraplatyptilia petroductylus</b> (Wlk.) [1, 2, 3, 7]	IN; NS; Popof Island.
<b>Platyptilia johnstoni</b> Lange [7, 20]	SW; AI; St. George Is.; St. Paul Is.
<b>Stenoptilia mengeli</b> Fern. [1, 2, 7]	H

## COPROMORPHIDAE (1)

**Lotisma trigonana** (Wlsm.) [6]

SC; Orca [1 record, 1899]

## CHOREUTIDAE (2)

<b>Caloreas</b> new species [7]	IN; SC; Anchorage; mi 250 Richardson Hwy <b>Note 3</b>
<b>Choreutis diana</b> (Hbn.) [4]	BC

## TORTRICIDAE (142)

<b>Acleris arcticana</b> (Gn.) [1, 2]	IN; SC; Ft. Wainwright; MP 40, Steese Hwy
<b>Acleris bowmanana</b> (McD.) [1, 2]	H
<b>Acleris britannia</b> Kft. [1, 2]	H; IN
<b>Acleris caliginosana</b> (Wlk.) [1, 2]	IN
<b>Acleris capizziana</b> Obr. [1]	IN
<b>Acleris effractana</b> (Hbn.) [1, 2, 3, 4, 8]	H; IN; KP; Dalton Hwy at Yukon River bridge; Ft. Wainwright; MP 312 Richardson Hwy; MP 214 Parks Hwy; Mendeltna Ck.,

<i>Acleris gloveranus</i> (Wlsm.) [4]	Glenn Hwy; MP 49 Steese Hwy; Robertson Lake, MP 1348
<i>Acleris hastiana</i> (L.) [1, 2]	Alaska Hwy <b>Note 4</b>
<i>Acleris hudsoniana</i> (Wlk.) [1, 2]	H; SE
<i>Acleris logiana</i> (Clerck) [4]	IN; SC
<i>Acleris maccana</i> (Treit.) [2]	IN
<i>Acleris maximana</i> (B. & Bsk.) [1, 2, 4]	IN
<i>Acleris nigrolinea</i> (Rob.) [1]	IN
<i>Acleris notana</i> (Don.) [4]	IN; Sunrise Inn
<i>Acleris schalleriana</i> (L.) [1, 2, 4]	IN
<i>Aethes deutschiana</i> (Zett.) [1, 2]	IN; KP; MD; NS
<i>Aethes sexdentata</i> Sabourin & Miller [1, 2]	H
<i>Aethes smethmanniana</i> (F.) [7]	SC; SE
<i>Ancylis comptana</i> (Frölich) [6]	“Alaska” (cited in Heinrich, 1923)
<i>Ancylis geminana</i> (Don.) [4]	IN; SC; NS
<i>Ancylis metamelana</i> (Wlk.) [4]	NS
<i>Ancylis subaequana kincaidiana</i> (Fern.) [4, 8]	IN
<i>Ancylis tineana</i> (Hbn.) [23]	KP
<i>Ancylis unguicella</i> (L.) [4, 7]	NS; MP 250 Richardson Hwy
<i>Aphelia gregalis</i> Razowski [6]	AR. <b>Note 5</b>
<i>Aphelia septentrionalis</i> Obr. [2, 5, 15]	BR; IN; 29 mi S of Deadhorse
<i>Apotomis</i> near <i>capreana</i> (Hbn.) [8]	AR
<i>Apotomis frigidana</i> (Pack.) [1, 7, 8]	H; IN; PI; MP 250 Richardson Hwy; St. Paul Is.
<i>Apotomis removana</i> (Kft.) [1]	IN
<i>Apotomis spinulana</i> (McD.)	IN. <b>Note 6</b>
<i>Apotomis spurinfida</i> Adamski [1, 2]	H
<i>Apotomis tertiana</i> McD. [1, 2, 4, 8]	IN; NS
<i>Archeopandemis coniferana</i> Mutuura [2]	SC; Anchorage
<i>Archips alberta</i> (McD.) [1]	BC
<i>Archips cerasivorana</i> (Fitch) [4]	SC; Anchorage area
<i>Archips packardiana</i> (Fern.) [4]	BC; IN
<i>Archips rosana</i> (L.) [2, 3, 4]	SC; Anchorage
<i>Archips tsuganus</i> (Powell) [2, 4]	SC; Anchorage
<i>Argyrotaenia occultana</i> Free. [1, 2, 23]	IN; KP; Fairbanks
<i>Argyrotaenia velutinana</i> (Wlk.) [1]	IN; Fairbanks area
<i>Argyrotaenia</i> species [2]	H
<i>Choristoneura albaniana</i> (Wlk.) [1, 2]	IN; NS; SC
<i>Choristoneura biennis</i> Free. [4]	SE
<i>Choristoneura conflictana</i> (Wlk.) [1, 2, 4]	IN; SE
<i>Choristoneura fractivittana</i> (Clem.) [1]	H
<i>Choristoneura fumiferana</i> (Clem.) [3, 7]	IN; Fairbanks
<i>Choristoneura orae</i> Free. [1, 2, 4, 7]	H; IN; SC; SE; Dyea; Fairbanks; Skagway
<i>Clepsis danilevskyi</i> Kostyuk [1, 8]	NS; Schrader Lake
<i>Clepsis illustrana</i> (Krogerus) [1, 2, 4, 8]	IN
<i>Clepsis kearfotti</i> Obr. [8]	IN
<i>Clepsis moeschleriana</i> (Wocke) [1, 2, 4, 8, 23]	BR; IN; KP; NS; Schrader Lake
<i>Clepsis peritana</i> (Clem.) [1, 2, 8]	H; IN; KP
<i>Clepsis persicana</i> (Fitch) [1, 2, 3, 8, 23]	H; IN; KP; NS; NW; SC; SP
<i>Clepsis virescana</i> (Clem.) [2, 4, 8]	IN
<i>Cochylis nana</i> (Haw.) [4]	IN
<i>Cochylis</i> species [23]	KP

<b>Cydia cornucopiae</b> (Tengström) [2, 4]	IN (North America record)
<b>Cydia piperana</b> Kft. [3]	KP
<b>Cydia pomonella</b> (L.) [2]	H
<b>Cydia prosperana</b> (Kft) [7, 4, 8]	IN; KP; NW; SE; Seward, Umiat
<b>Cydia strobilella</b> (L.) [2, 4]	IN; KP; SC; SE; Anchorage; Fairbanks; Homer; Nenana Hwy; Seward; Sitka
<b>Cydia near succedana</b> ([D. & S.]) [2]	IN
<b>Decodes horariana</b> (Wlsm.) [7]	IN; Fairbanks
<b>Dichrorampha sedatana</b> (Bsk.) [2, 4, 8]	IN
<b>Dichrorampha simulana</b> (Clem.) [7]	AR; Paxson, 22 km N
<b>Eana argentana</b> (Clerck) [1, 2, 3, 7, 15]	AR; IN; KP; SC; Anchorage; Fairbanks; MP 61.7 Dalton Hwy; Tok
<b>Eana osseana</b> (Scop.) [1, 2, 7]	AR; BR; H; KP; SP; SW
<b>Endothenia affiliata</b> McD. [8]	IN
<b>Epiblema simploniana</b> (Dup.) [7, 8]	BR; IN; NS; Anaktuvuk Pass
<b>Epinotia arctostaphylana</b> (Kft.) [4]	IN
<b>Epinotia castaneana</b> (Wlsm.) [1, 2]	H
<b>Epinotia columbia</b> (Kft.) [1, 2]	BC; H; NS; Dalton Hwy at Jim River. <b>Note 7</b>
<b>Epinotia cruciana</b> (L.) [2, 7, 8]	H; IN; NS; SC; Big Delta; Fort Wrigley; Isabel Pass; King Salmon; Naknek River; Richardson Hwy, MP 206, 250; Unalakleet
<b>Epinotia lomonana</b> (Kft.) [1, 2]	H
<b>Epinotia medioplacata</b> (Wlsm.) [1, 2, 8]	H; IN
<b>Epinotia nisella</b> (Clerck) [1, 2, 4]	BC; H; IN; SC; Anchorage
<b>Epinotia pulsatillana</b> (Dyar) [1, 2, 4]	IN
<b>Epinotia radicana</b> (Heinr.) [1, 4]	IN; SC; Anchorage; Copper Center
<b>Epinotia rectiplicana</b> (Wlsm.) [1, 7]	H; KP; SW; King Salmon; Naknek River
<b>Epinotia removana</b> McD. [?]	BC
<b>Epinotia solandriana</b> (L.) [1, 2, 3, 4, 7]	IN; NS; SE; Anchorage; Cooper Landing; Copper River; Cordova; Excursion Inlet; Juneau; KP; Kulik Lake; Nashagak River; Ninilchik; Porcupine Butte; Sunrise; Willow
<b>Epinotia solicitana</b> (Wlk.) Group [1]	IN
<b>Epinotia terracoctana</b> (Wlsm.) [2]	H
<b>Epinotia transmissana</b> (Wlk.) Group [2]	IN
<b>Epinotia trigonella</b> (L.) [1, 2, 3, 4] = <i>E. indecorana</i> (Zett.)	IN; KP
<b>Epinotia vagana</b> Heinr. [1]	H
<b>Epinotia</b> species 1 [1, 2]	IN
<b>Epinotia</b> species 2 [2]	IN; KP
<b>Epinotia</b> species 3 [2]	H
<b>Eucosma agricolana</b> (Wlsm.) [8]	IN; NS
<b>Eucosma</b> near <i>biplagata</i> (Wlsm.) [2]	NW
<b>Eucosma dodana</b> Kft. [6, 7]	NS; PI; Schrader Lake; St. Paul Is.
<b>Eucosma hohenwartiana</b> ([D. & S.]) [4] = <i>E. pupillana</i> (Hbn.)	NW (North America record)
<b>Eucosma</b> species [4]	IN
<b>Eulia ministrana</b> (L.) [1, 2, 4, 7, 23]	IN; KP; SC; SE; Anchorage; Big Delta; Mt. Fairplay; MP 250 Richardson Hwy MP 32 Taylor Hwy; Naknek IN (Eagle Summit)
<b>Grapholita ? interstinctana</b> (Clem.) [8]	IN; Dalton Hwy at Jim R. and Yukon R. bridge
<b>Gypsonoma fasciolana</b> (Clem.) [2, 4, 8]	IN; NS; SW; Barton Is.; Camden Bay;
<b>Gypsonoma parryana</b> (Curt.) [2, 7]	MP 250 Richardson Hwy; Unalakleet

<b>Gypsonoma</b> species [8]	IN (Eagle Summit)
<b>Hedya atropunctana</b> (Zett.) [23]	KP; NS; Dietrich River
<b>Hystrichophora asphodelana</b> (Kft.) [1, 2, 3, 7]	AR; IN; NW; Big Delta; Umiat
<b>Lozotaenia hesperia</b> Powell [1, 2, 7]	BR; NS; SC; Anchorage; Umiat
<b>Notocelia purpurissatana</b> (Heinrich) [2]	IN; Fairbanks area; Ft. Wainright; MP 39 Steese Hwy
<b>Olethreutes bipartitana</b> (Clem.) [7, 8]	IN; KI; KP; SC; Afognak Is.; Kodiak; Naknek
<b>Olethreutes ? buckellana</b> (McD.) [8]	IN
<b>Olethreutes costimaculana</b> (Fern.) [1, 2]	H; KP
<b>Olethreutes galaxana</b> Kft. [6]	Alaska. <b>Note 8</b>
<b>Olethreutes glaciana</b> (Mösch.) [2, 3, 4, 8, 23]	H; IN; KP; SC;
<b>Olethreutes heinrichana</b> McD. [8]	NS (Galbraith Lake); Houston
<b>Olethreutes inquietana</b> (Wlk.) [1, 2, 7, 15]	NS; IN; PI; MP 298.5 Dalton Hwy; St. Paul Is.
<b>Olethreutes mengelana</b> (Fern.) [1, 15]	IN; NS
<b>Olethreutes metallicana</b> (Hbn.) [2, 4, 7, 8, 23]	IN; KP; SC; Anchorage; Moose Pass; MP 249 Richardson Hwy; Seward
<b>Olethreutes nordeggana</b> (McD.) [1, 2, 3, 8, 15]	BC; BR IN; NS; Fairbanks
<b>Olethreutes obsoletana</b> Zett. [1]	AR; BR; SP
= <i>O. kennethana</i> McD.	
<b>Olethreutes palustrana</b> (L. & Z.) [6, 8]	NS; Galbraith and Schrader Lakes
<b>Olethreutes schulziana</b> (F.) [2, 4, 7]	IN; NS; MP 250 Richardson Hwy
<b>Olethreutes septentrionana</b> (Curt.) [8]	IN; NS; SC
= <i>O. schaefferana</i> (H.-S.)	
<b>Olethreutes turfosana</b> H.-S. [1, 2, 4, 7, 8]	IN; NS; SC; SP; MP 250 Richardson Hwy
<b>Olethreutes</b> species [1, 8]	10 mi S. Houston; Sterling
<b>Orthotaenia undulana</b> ([D. & S.]) [2, 3, 23]	IN; KP
<b>Phaneta camdenana</b> (McD.) [1, 2, 7, 8]	IN; NS; Camden Bay
<b>Phaneta insignata</b> (Heinr.) [8]	SC
<b>Phaneta montanana</b> (Wlsm.) [8]	IN; MD
<b>Phaneta southamptonensis</b> (Heinr.) [1]	NS
<b>Phaneta</b> species 1 [1, 2]	NW
<b>Phaneta</b> species 2 [1]	NS
<b>Phtheochroa fulviplicana</b> (Wlsm.) [4]	NS
<b>Phtheochroa vulneratana</b> (Zett.) [2, 4]	BR (Anaktuvuk Pass); NS
<b>Pseudosciaphila duplex</b> (Wlsm.) [2]	IN
<b>Retinia metallica</b> (Bsk.) [2]	Fairbanks
<b>Rhopobota naevana</b> (Hbn.) [2]	NS
<b>Rhyacionia buoliana</b> ([D. & S.]) [4]	SC
<b>Selenodes concretana</b> (Wocke) [4, 6, 8]	IN
<b>Sparganothis rubicundana</b> (H-S.) [6]	Kotzebue; Sagwon; Umiat; Unalakleet; Geillini Lake [Stone Mountain]
<b>Tia enervana</b> (Ersch.) [4, 6, 8]	IN; NS; SC; Schrader Lake
= <i>T. vulgana</i> (McD.)	
<b>Xenotemna pallorana</b> (Rob.) [?]	Alaska, no locality cited; [Chapman & Lienk, 1971]
<b>Zeiraphera canadensis</b> Mutuura & Free. [?]	SC; Anchorage
<b>Zeiraphera fortunana</b> (Kft.) [2]	SE; Juneau
<b>Zeiraphera griseana</b> (Hbn.) [1, 2]	H; IN
<b>Zeiraphera improbana</b> (Wlk.) [6]	NS; Schrader Lake
<b>Zeiraphera unfortunana</b> Ferris & Kruse [1, 2, 3]	H; KP; SC; Alder Beach; Anchorage; MP 39 Steese Hwy
<b>Zeiraphera vancouverana</b> McD. [2, 4]	SE; SW:AI; Dutch Harbor; Juneau. <b>Note 9</b>

## SESIIDAE (9)

<b>Albuna pyramidalis</b> (Wlk.) [1, 2, 3, 4, 7, 15, 23]	BC; IN; KP; NS; SE; Anchorage; Fairbanks; MP 8, 226 Dalton Hwy; Seward
<b>Paranthrene robiniae</b> (Hy. Edw.) [?]	Alaska, localities not stated. <b>Note 10</b>
<b>Paranthrene tabaniformis</b> (Rottemburg) [?]	Cooper Landing
<b>Synanthedon arctica</b> (Beut.) [6, 22]	Kodiak; Ruby
<b>Synanthedon bolteri</b> (Hy. Edw.) [?]	Alaska, localities not stated. <b>Note 10</b>
<b>Synanthedon culiciformis</b> (L.) [4, 7]	Anchorage; Cooper Landing; Sunrise
<b>Synanthedon novaroensis</b> (Hy. Edw.) [7]	Skagway
<b>Synanthedon polygoni</b> (Hy. Edw.) [6]	Lazy Bay
<b>Synanthedon saxifragae</b> (Hy. Edw.) [6]	Ft. Yukon

## PYRALIDAE (16)

<b>Acrobasis tricolorella</b> Grt. [1, 2]	H
<b>Anerastia lotella</b> (Hbn.) [4]	NW; Nogahabara Dunes, Koy-Now NWR; Ft. Yukon
<b>Dioryctria abietivorella</b> (Grt.) [1]	H
<b>Dioryctria reniculella</b> (Grt.) [1, 2]	<b>H. Note 11</b>
<b>Dioryctria reniculelloides</b> Mutuura & Mun. [4, 23]	KP; SC; Anchorage
<b>Ephestia kuehniella</b> Zell. [4]	Fairbanks; occurs in stored grain products and bee hives
<b>Homoeosoma phaeoboreas</b> Goodson & Neunzig [2]	Fairbanks
<b>Philodema rhoiella</b> (Dyar) [6]	NS (Schrader Lake)
<b>Pima boisduvaliella</b> (Gn.) [2]	NS
<b>Plodia interpunctella</b> (Hbn.) [3]	<b>Note 12</b>
<b>Polopeustis arctiella</b> (Gib.) [1, 2, 3]	NS
<b>Pyla aequivoca</b> Heinr. [6]	Near Ft. Yukon
<b>Pyla fusca</b> (Haw.) [1, 2]	BR; KP; NW; Nogahabara Dunes, Koy-Now NWR
<b>Sciota terminalis</b> (Hulst) [?]	Ft. Yukon
<b>Sciota yuconella</b> (Dyar) [7]	Ft. Yukon
<b>Vitula serratilineella</b> Rag. [4]	IN; KP; Fairbanks, Palmer

## CRAMBIDAE (40)

<b>Agriphila ruricolella</b> (Zell.) [2]	BC
<b>Anania funebris glomeralis</b> (Wlk.) [1]	H
<b>Anania mysippusalis</b> (Wlk.) [2]	IN; Fairbanks
<b>Catoptria latiradiella</b> (Wlk.) [1, 2, 7]	H; Anchorage
<b>Catoptria oregonica</b> (Grt.) [2]	H
<b>Catoptria trichostoma</b> (Christoph) [1, 2, 7, 15]	BR; IN; NS; mi 32 Denali Hwy; Unalakleet
<b>Chrysoteuchia topiarius</b> (Zell.) [5]	IN; SE; Ketchikan; Montana Creek
<b>Crambus alienellus</b> (Zinck.) [5, 7]	IN; NW; SE; Anchorage; Buckland, Kotzebue Sound; Ketchikan; Montana Creek; Seward
<b>Crambus bidens</b> Zell. [7]	Anchorage
<b>Crambus hamellus</b> (Thunb.) [7]	Lawing
<b>Crambus pascuellus</b> (L.) [7]	Anchorage; Unalakleet
<b>Crambus perlellus innotatellus</b> (Wlk.) [1, 2, 3, 4, 7, 23]	BC; H; KI; KP; SC; SE; Anchorage; Kodiak
<b>Crambus unistriatellus</b> Pack. [7]	Anchorage; Big Delta
<b>Crambus whitmerellus</b> Klots [1, 7]	KP; SC; Big Delta; Lawing
<b>Eudonia albertalis</b> (Dyar) [2]	H
<b>Eudonia commortalis</b> (Dyar) [2]	H
<b>Eudonia alpina alpina</b> (Curtis) [6, 7]	Unalakleet
<i>= E. madgei</i> Mun.	

<b>Eudonia alpina lugubralis</b> (Wlk.) [2]	H
<b>Eudonia spenceri</b> Mun. [1, 2]	H; KP
<b>Evergestis finalis columbialis</b> Mun. [1, 2]	BC; H; IN
<b>Gesneria centuriella beringiella</b> Mun. [1, 2, 3, 7, 15, 23]	BC; IN; KP; SC; SE; SP; Fairbanks
<b>Loxostege anartalis albentalis</b> B. & McD. [2, 15]	BC; IN; NS
<b>Loxostege commixtalis</b> (Wlk.) [1, 7]	IN; Big Delta; Eagle
<b>Loxostege sticticalis</b> (L.) [1, 15]	IN; MP 188.6 Dalton Hwy
<b>Orenaia arcticalis</b> Mun. [?6]	BR
<b>Ostrinia marginalis</b> (Wlk.) [2]	BC
<b>Pediasia</b> species near <b>aridella edmontella</b> (McD.) [1]	Homer
<b>Pediasia browerella</b> (Klots) [1, 2, 7, 15]	NS; NW; Cape Thompson; Deadhorse; Denali Hwy mi 32; Unalakleet
<b>Pediasia trisepta</b> (Wlk.) [6]	Popof Is.; Seldovia; Yakutat
<b>Pediasia truncatella</b> (Zett.) [2, 7]	IN; Big Delta; Unalakleet
<b>Pyrausta nicalis</b> (Grt.) [2]	H
<b>Pyrausta subsequalis borealis</b> Pack. [1, 2, 7]	BR; IN; Big Delta; Fairbanks; mi 114 Steese Hwy
<b>Pyrausta tuolumnalis</b> B. & McD. [2]	BC
<b>Scoparia biplagialis afognakalis</b> Mun. [6, 7]	KI; Afognak; Kodiak
<b>Scoparia biplagialis pacificalis</b> Dyar [1, 2]	H
<b>Tehama bonifatella</b> (Hulst) [5]	SE; Auke Bay
<b>Udea alaskalis</b> (Gib.) [1, 2, 7]	IN; NS; PI; Collinson Pt.; St Paul Is.; mi 250 Richardson Hwy
<b>Udea beringialis</b> Mun. [1, 2, 7]	BR; SC; Nulato; Nunivak Is.; Unalakleet
<b>Udea inquinatalis</b> (Zell.) [7]	MP 250 Richardson Hwy
<b>Udea itysalis kodiakensis</b> Mun. [7]	KI; Afognak; Cold Bay; Kodiak
<b>Udea itysalis tillialis</b> (Dyar) [2, 3, 7]	H; KP; Curry; near Cooper Landing
<b>Udea radiosalis</b> (Mösch.) [1, 2]	H; KP; Cape Thompson
<b>Udea washingtonalis nomensis</b> Mun. [4, 6, 7]	KP; PI; Anchorage; Cottonwood Bay; Cordova; Nome; Nulato; Sunrise; Unalaska
<b>Udea washingtonalis pribilofensis</b> Mun. [7, 17]	PI; St. Paul Is.; St. George Is.
<b>Udea washingtonalis washingtonalis</b> (Grt.) [2, 23]	KP; SE; Ketchikan

## DREPANIDAE (6)

<b>Ceranemota fasciata</b> (B. & McD.) [1]	H
<b>Drepana arcuata</b> Wlk. [1, 6]	BC; IN; Fairbanks; Rampart
<b>Drepana bilineata</b> (Pack.) [2, 4]	H
<b>Euthyatira pudens</b> (Gn.) [1]	H
<b>Habrosyne scripta</b> (Gosse) [1, 4, 13]	IN; SC; SE; Anchorage; Fairbanks; Palmer; Sunrise
<b>Pseudothyatira cymatophoroides</b> (Gn.) [2]	H

## GEOMETRIDAE (140)

<b>Antepirrhoe atrifasciata</b> (Hulst) [3]	H
<b>Antepirrhoe fasciata</b> B. & McD. [6, 7]	Ketchikan; Rampart
<b>Antepirrhoe semiatrata</b> (Hulst) [2, 6, 7]	H; IN; Big Delta; Fairbanks; Ketchikan
<b>Anticlea multiferata</b> (Wlk.) [?]	GB; Rampart
<b>Anticlea vasiliata</b> Gn. [3, 6, 7]	Anchorage; Hope; Ketchikan; Palmer
<b>Archiearis infans</b> (Mösch.) [1, 3]	IN; SC
<b>Aspitates forbesi</b> Mun. [1, 2, 15]	BR; IN; NS; Fairbanks
<b>Aspitates orciferarius</b> (Wlk.) [1, 2]	BC
<b>Aspitates taylori</b> (Butl.) [1]	AR; IN

<b>Cabera borealis</b> (Hulst) [1, 2, 13]	BC; IN; Palmer
<b>Cabera erythemia</b> Gn. [4, 12]	H; Delta Jct.
<b>Cabera exanthemata</b> (Scop.) [1, 2, 3, 15]	BC; GB; H; IN; KP; MD; SC; MP 188.6 Dalton Hwy; Anchorage; Fairbanks; near Fox; Willow
<b>Cabera variolaria</b> Gn. [1, 2]	GB; H
<b>Campaea perlata</b> (Gn.) [1, 2, 3, 4, 13, 23]	BC; H; IN; KP; SC; SE; Anchorage; Fairbanks; Palmer
<b>Carsia sororiata</b> (Hbn.) [1, 7, 12]	IN; KI; KP; SC; SP; SW; Driftwood
<b>Ceratodalia gueneata</b> Pack. [1; 2, 6]	BC; H; IN; Ketchikan
<b>Cladara limitaria nigroangulata</b> (Stkr.) [1, 3, 6, 7]	IN; SC; SE; Anchorage; Fairbanks; Ketchikan
<b>Colostygia circumvallaria</b> Hbn. [1, 2, 3, 6, 7]	AR; IN; SP; Denali NPP; Fairbanks; Juneau; Nome. Species status by Schmidt & Anweiler (2010)
<b>Cyclophora pendulinaria</b> (Gn.) [1, 2, 3]	BR; H; IN
<b>Digrammia denticulata</b> (Grt.) [2]	BC
<b>Digrammia rippertaria</b> (Dup.) [6]	Rampart; Ft. Yukon
<b>Digrammia ubiquitata</b> Fgn. [6]	Rampart; Ft. Yukon; Ketchikan
<b>Dysstroma brunneata</b> (Pack.) [1, 2]	H; KP
<b>Dysstroma citrata</b> (L.) [1, 2, 4, 7, 12, 23]	AR; BC; H; IN; KP; SC; SE; SW; Afognak; Bering Is.; Big Delta; Cordova; Excursion Inlet; Homer; Ketchikan; King Salmon; Sitka; Unalakleet; Unalaska
<b>Dysstroma colvillei</b> Blackmore [6, 12]	Ketchikan. <b>Note 13</b>
<b>Dysstroma hersiliata</b> (Gn.) [1, 2]	H; KP
<b>Dysstroma pseudimmanata</b> (Heydemann) [1, 2, 3, 4, 6, 7, 12]	H; IN; Anchorage; Denali NPP; Ketchikan. <b>Note 14</b>
<b>Dysstroma sobria</b> Swett [12]	Ketchikan
<b>Ecliptopera silacea</b> ([D. & S.]) [1, 2, 3, 6, 7, 13, 23]	H; IN; KP; SC; SE; SW; Anchorage; Cordova; Curry; Denali NPP; Fairbanks; Ketchikan; Nulato; Rampart; Shugak Bay; Skagway; Unalakleet
<b>Ectropis crepuscularia</b> ([D. & S.]) [4]	SE; Ketchikan. Discussion of this taxon in Schmidt & Anweiler (2010)
<b>Entephria bradorata</b> (Mun.) [1, 7, 11]	KI; NS; SP; SW:AI; Atigun Pass; Cape Thompson; Cold Bay; Driftwood; Unalakleet
<b>Entephria kidluitata</b> (Mun.). [1, 7]	NS; Cape Thompson
<b>Entephria lynda</b> Troub. [6, 7]	NS; Chandler Lake; Noluck Lake
<b>Entephria multivagata</b> (Hulst) [7]	SP
<b>Entephria polata</b> (Dup.) [1, 6, 7, 12]	AR; IN; KI; SL; SP; SW; Driftwood; Umiat; Unalakleet
<b>Entephria takuata</b> (Tayl.) [1, 2]	H
<b>Enypia packardata</b> Tayl. [1, 2]	H; SE
<b>Enypia venata</b> (Grt.) [1, 2, 6]	H; SE; Funter Bay
<b>Epelis truncataria</b> (Wlk.) [1, 2, 7, 12]	AR; BC; GB; IN
<b>Epirrhoe alternata</b> (Müller) [1, 2, 3, 7, 13]	IN; KI; SC; Anchorage; Cordova; Denali NPP; Fairbanks; Ft. Yukon; Naknek; Sitka; Yakutat
<b>Epirrhoe sperryi</b> Herbuleot [1, 2, 12]	BC; IN; KI; SE; SP; SW; Canberg Sta.; Denali NPP; Fairbanks; Glenallen; Ketchikan; Nome
<b>Epirrita undulata</b> (Harrison) [1, 2, 3, 5, 23]	H; KP; Anchorage; Eagle River, Excursion Inlet. <b>Note 15</b>
<b>Eulithis destinata</b> (Mösch.) [1, 2, 3, 6, 7, 23]	AR; IN; KP; SE; SP; SW; Delta Jct., 32 km S; Denali NPP (Sheldon Pass); Eagle River; Ketchikan; King Salmon; Nome; Nulato; Nushayak; Paxson, 22 km N; Rampart; Seward; Sitka; Unalakleet
<b>Eulithis populata</b> (L.) [1, 6]	AR; SC; SW; near Cape Pierce; Denali NPP; Palmer
<b>Eulithis propulsata</b> (Wlk.) [2, 6, 7, 13]	H; KP; SW:AI; Eagle River; Ketchikan; Nulato; Rampart; Ruby; Seward; Unalaska

<b>Eulithis testata</b> (L.) [1, 6, 7, 23]	BC; IN; KP; SC; College; Ft. Yukon; Rampart
<b>Eulithis xylinea</b> (Hulst) [1, 2, 3, 6, 7, 13, 23]	BC; H; IN; KP; Delta Jct., 32 km S; Fairbanks; Ft. Yukon; Nulato; Rampart; Ruby; Sterling
<b>Euphyia unangulata intermediata</b> (Gn.) [2]	BC; IN; Fairbanks
<b>Eupithecia absinthiata</b> (Clerk) [2]	H; IN; Fairbanks
<b>Eupithecia albicapitata</b> Pack. [2, 15]	IN; KP; NS; MP 188.6 Dalton Hwy
<b>Eupithecia annulata</b> (Hulst) [2, 6]	Ft. Wainright; Cordova; West Fairbanks
<b>Eupithecia assimilata</b> Dbldy. [2]	IN; KP; SE; Ketchikan
<b>Eupithecia bryanti</b> Tayl. [1, 2, 7]	H; SP; Juneau; 22 km N of Paxson
<b>Eupithecia casloata</b> (Dyar) [2]	NS
<b>Eupithecia cretacea</b> (Pack.) [1, 2, 6]	H; Ketchikan
<b>Eupithecia gelidata</b> Mösch. [1, 2, 6]	SW; Agnes Lake; Ketchikan; Popoff Is.
<b>Eupithecia graefii</b> (Hulst) [2, 6]	SE; Anchorage; Skagway; Sitka
<b>Eupithecia harrisonata</b> McKay [2]	SE (Skagway)
<b>Eupithecia interruptofasciata</b> Pack. [2]	H; IN
<b>Eupithecia lachrymosa</b> (Hulst) [2, 3]	BC; IN; Fairbanks; Sterling
<b>Eupithecia misturata</b> (Hulst) [2]	IN
<b>Eupithecia nimbicolor</b> (Hulst) [2]	AR; BC; Denali NPP
<b>Eupithecia niphadophilata</b> (Dyar) [2]	H
<b>Eupithecia olivacea</b> Tayl. [2]	IN
<b>Eupithecia pygmaeata obumbrata</b> Tayl. [7]	NS; Umiat
<b>Eupithecia satyrata</b> (Hbn.) [2, 3, 6, 23]	IN; SC; Fairbanks; Yakutat
<b>Eupithecia sewardata</b> Bolte [7]	Seward
<b>Eupithecia sharronata</b> Bolte [2, 14]	KP; SC
<b>Eupithecia succenturiata</b> (L.) [23]	KP
<b>Eupithecia tripunctaria</b> H.-S. [2, 6]	H; Popoff Is.; Ungava Is.
<b>Eupithecia</b> species (? undescribed) [2]	Fairbanks
<b>Gnophos macguffini</b> Smiles [2]	BR
<b>Holarctias sentinaria</b> (Gey.) [1, 2, 3, 7, 15]	AR; BR; NS; SC; SP; Denali NPP (Sheldon Pass); Ft. Yukon; Omilak; Wiseman airport BC; Ft. Yukon SE; SW; Ketchikan; Naknek
<b>Horisme incana</b> Swett [2, 6]	AR; BR; NS; SC; SP; Denali NPP (Sheldon Pass); Ft. Yukon; Omilak; Wiseman airport BC; Ft. Yukon SE; SW; Ketchikan; Naknek
<b>Hydriomena exculpata</b> B. & McD. [7]	AR; H; KP; SP; SW; Anchorage; Big Delta; Juneau; King Salmon; Paxson; Unalakleet
<b>Hydriomena furcata</b> (Thunb.) [1, 2, 4, 7, 23]	KP; SE; Cordova; Ketchikan; Yakutat
<b>Hydriomena irata irata</b> Swett [6]	H; IN; Fairbanks
<b>Hydriomena renunciata</b> (Wlk.) [2]	SC
<b>Hydriomena ruberata</b> (Freyer) [2]	SE; Sitka (Alaska record, 2012)
<b>Hydriomena speciosata</b> (Pack.) [3]	IN
<b>Idaea rotundopennata</b> (Pack.) [1]	SE; Bradfield Canal
<b>Lambdina fiscellaria lugubrosa</b> (Hulst) [4]	IN; SC; SP; Fairbanks; Palmer (Choi, 2000)
<b>Lampropteryx suffumata</b> ([D. & S.]) [5]	IN
<b>Leucobrephos brephoides</b> (Wlk.) [1, 2, 3]	SC; Palmer
<b>Lobophora montanata</b> Pack. [13]	AR; IN; SC; Anchorage; Fairbanks; MP 188.6 Dalton Hwy; Denali NPP; Ketchikan; Palmer. <b>Note 16</b>
<b>Lobophora nivigerata</b> Wlk. [1, 2, 6, 7, 13, 15] = <i>L. magnoliatoidata</i> (Dyar)	IN; KP; Palmer
<b>Lycia rachelae</b> (Hulst) [1, 3]	SC; Palmer
<b>Lycia ursaria</b> (Wlk.) [3]	IN
<b>Macaria sexmaculata</b> Pack. [1]	BC; H; IN; Fairbanks; MP 188.6 Dalton Hwy
<b>Macaria signaria</b> (Hbn.) [2, 15]	Southern Alaska
<b>Melanolophia imitata</b> (Wlk.) [4]	KP; SE; Ketchikan; Nulato; Skagway
<b>Mesoleuca gratulata</b> (Wlk.) [6]	BC; GB; IN; KP; Ft. Yukon
<b>Mesothea incertata</b> (Wlk.) [1, 2, 3, 15]	

<b>Metanema determinata</b> Wlk. [2]	BC; IN; Fairbanks
<b>Operophtera bruceata</b> (Hulst) [1, 2, 3, 4, 12, 13]	IN; KI; KP; SC; Anchorage; Eagle River; Dillingham; Fairbanks; Karluk Lake; Matanuska; Palmer; Rampart; Sunrise SP; SW:AI; Nashaga River; Nulato [may be form of <i>P. grandis</i> ]
<b>Perizoma alaskae</b> (Hulst) [1, 2, 6]	KI
<b>Perizoma costiguttata</b> (Hulst) [12]	H; KP; SE; Cordova; Juneau; Ketchikan; Nulato
<b>Perizoma grandis</b> (Hulst) [1, 2, 3, 6, 23]	BC; IN; KP; SC; Excursion Inlet; Fairbanks; Palmer
<b>Plemyria georgii</b> Hulst [1, 3, 4, 7, 13, 23]	IN; NS; SL; Chandler Lake; MP 247–248, 302–303 Dalton Hwy; Noluck Lake
<b>Psychophora sabini</b> Kby. [1, 2, 7, 15]	IN; Eagle Summit
<b>Psychophora</b> species nr. <i>sabini</i> [1, 7]	BR; MP 237 Dalton Hwy Eagle Creek. <b>Note 17</b>
<b>Psychophora</b> species nr. <i>suttoni</i> [1, 15]	PI; St.George & St. Paul Is. <b>Note 17</b>
<b>Psychophora</b> new species [7]	
<b>Rheumaptera hastata</b> (L.) [1, 2, 3, 4, 6, 7, 13, 15]	H; IN; KP; NS; SC; SE; Anchorage; Curry; Ester; Moose Pass; Palmer; Umiat. <b>Note 18</b>
<b>Rheumaptera subhastata</b> (Nolcken) [3, 4, 6, 7, 12, 15]	H; IN; KP; NS; SC; SE; Anchorage; Dillingham; Kasitna Bay; Naknek; Seward; Wrangell. <b>Note 18</b>
<b>Rheumaptera undulata</b> (L.) [1, 2, 6]	H; IN; SE; Ft. Yukon; Ketchikan
<b>Scopula cajanderi septentrionica</b> McD. [2]	AR; BR; SP; Arctic Village; Denali NPP (Stony Creek); Omilak, Darby Mts.
<b>Scopula frigidaria</b> (Mösch.) [1, 2, 4, 7]	AR; BC; BR; IN; KI; KP; NS; SC; SW; Anchorage; Denali NPP (Alaska Pass); Fairbanks; Ft. Yukon; King Salmon; Olga Bay; Rampart; Umiat; Unalakleet
<b>Scopula inductata</b> (Gn.) [2, 15]	BC; BR; IN; NW; SE; SP; Big Delta; Fairbanks; Kennicott; Kotzebue; MP 166 Dalton Hwy; Naknek River; Nome; Skagway; Tanana
<b>Scopula junctaria</b> (Wlk.) [13]	SC; Palmer
<b>Selenia alciphearia</b> Wlk. [2, 3]	AR; IN; Fairbanks
<b>Sericosema juturnaria</b> (Gn.) [?6]	“Alaska” [Packard, 1876]
<b>Sicya macularia</b> (Harr.) [1, 3, 4, 6, 7, 13]	AR; BC; H; IN; SC; SE; Anchorage; Delta Jct., 32 km S; Fairbanks; Palmer; Rampart; Sterling. <b>Note 19</b>
<b>Spargania luctuata</b> ([D. & S.]) [1, 2, 3, 4, 6, 7, 12, 13, 23]	IN; KI; KP; SC; SE; SW; MP 226 Dalton Hwy; MP 114 Steese Hwy; Anchorage; Curry; Fairbanks; Hope; King Salmon
<b>Spargania magnoliata</b> Gn. [1, 2, 4, 6, 7]	H; IN; KI; SC; SE; SP; Anchorage; Cordova; Homer; Isabel Pass; Ketchikan; Nome; Seward; Sunrise
<b>Speranza bitactata</b> (Wlk.) [1, 4]	BC; H; IN
<b>Speranza boreata</b> Fgn. [1, 2]	AR; H; IN; SC; SW; Palmer; Fairbanks area (Ester & Murphy Domes)
<b>Speranza brunneata</b> (Thunb.) [1, 3, 4, 15, 23]	AR; BC; IN; KP; SC; SW; Fairbanks
<b>Speranza loricaria</b> (Evers.) [1]	IN; KP
<b>Speranza occiduaria</b> (Pack.) [2] = <i>S. andersoni</i> (Swett)	H. <b>Note 20</b>
<b>Spodolepis danbyi</b> (Hulst) [1]	SC; SE. <b>Note 21</b>
<b>Stamnodes topazata</b> (Stkr.) [1, 4, 6, 7]	AR; BC; IN; KP; SC; SP; Anchorage; Cooper Landing; Denali NPP; Eklutna; Moose Pass; mi 205 Alaska-Richardson Hwy; Spenard
<b>Stenoporpia pulmonaria albescens</b> (Hulst) [5]	“Alaska”—no locality stated
<b>Thallophaga hyperborea</b> (Hulst) [6]	TL Virgin Bay; Prince William Sound
<b>Thera otisi</b> (Dyar) [2]	H

<b>Trichodezia albovittata</b> (Gn.) [1, 2, 4, 7, 12, 13]	BC; IN; KP; SE; Anchorage; Barnshaw; Fairbanks; Homer; Hope; Ketchikan; Nulato; Palmer; Sitka; Skagway; Sunrise H; Glen Hwy; Sunrise
<b>Venusia cambrica</b> Curt. [2, 4, 12]	KP; Hope; Ketchikan; Seward
<b>Venusia pearsalli</b> (Dyar) [6, 7]	AR; BC; BR; KP; NW; SW; Ft. Yukon; Kotzebue; Rampart BR; IN; NS; SP; MP 377–382 Dalton Hwy; Fairbanks; Nome; Umiat. <b>Note 22</b>
<b>Xanthorhoe abrasaria</b> (H.-S.) [1, 2, 3, 23]	SE; SW:AI; Berg Bay; Ketchikan; Kukak Bay; Nushaik River; Shigak; Virginia Bay; Yakutat. <b>Note 22</b>
<b>Xanthorhoe baffinensis</b> McD. [2, 7, 13, 15]	KP; PI; SC; SP; SW:AI; Anchorage; Cold Bay; King Salmon; Kodiak; Nome; Nulato; Popoff Is.; Rampart; Seward; Sourdough; Unalakleet
<b>Xanthorhoe borealis</b> Hulst [1]	IN; KI; KP; SC; Cordova; Ketchikan; Palmer; Rampart AR; IN; SC; SE; SW; Anchorage; Fairbanks; King Salmon IN; KP; SC; SP; SW; Anchorage; Cold Bay; Ketchikan; King Salmon; Nome; Seward; MP 250 Richardson Hwy; Unalakleet AR; H; SC; SW; Anchorage; Ft. Wrangell; Ketchikan; King Salmon; Nome; Nulato; Yakutat
<b>Xanthorhoe decoloraria</b> Esper [1, 2, 3, 7]	AR; IN; KP; PI; SE; Denali NPP; Charney Creek; Ketchikan; Umiat
<b>Xanthorhoe defensaria</b> (Gn.) [2, 12, 13]	IN; SC; Anchorage; Fairbanks
<b>Xanthorhoe ferrugata</b> (Clerk) [1, 2, 3, 7]	KP
<b>Xanthorhoe fossaria</b> Tayl. [1, 7, 23]	IN; Ft. Yukon
<b>Xanthorhoe labradorensis</b> (Pack.) [1, 2, 7]	
<b>Xanthorhoe pontiaria</b> Tayl. [7, 23]	
<b>Xanthorhoe ramaria</b> S. & C. [2]	
<b>Xanthorhoe</b> species [23]	
<b>Zenophleps lignicolorata</b> (Pack.) [6]	
<b>LASIOCAMPIDAE</b> (2)	
<b>Malacosoma californicum</b> (Pack.) [4]	SC; Anchorage. Introduced in nursery stock and eradicated. <b>Note 23</b>
<b>Phyllodesma americana</b> (Harr.) [1, 6, 23]	IN; KP; SC; Palmer
<b>SPHINGIDAE</b> (7)	
<b>Hemaris thetis</b> (Bdv.) [1]	Sunshine Hill ca. 28 mi NW of Haines. <b>Note 24</b>
<b>Hemaris thysbe</b> (F.) [1, 2, 3]	AR; IN; IN; S; Fairbanks
<b>Hyles gallii</b> (Rottemburg) [1, 2, 3, 7]	BC; IN; NS; SC; SE; Wrangell
<b>Manduca sexta</b> (L.) [4]	SC; Anchorage. <b>Note 25</b>
<b>Proserpinus flavofasciata</b> (Wlk.) [1]	IN
<b>Smerinthus cerisyi</b> Kby. [1]	IN; Tok; Yarger Lake
<b>Smerinthus ophthalmica</b> Bdv. [1]	H; SE; Haines Hwy mi 8.5, 40, 42, border station; Skagway. <b>Note 24</b>
<b>NOCTUOIDEA</b> (237)	
<b>NOTODONTIDAE</b> (6)	
<b>Closteria albosigma</b> Fitch [1]	IN; Fairbanks area
<b>Furcula occidentalis gigans</b> (McD.) [3]	KP; SC; Ninilchik; Palmer
<b>Furcula scolopendrina</b> (Bdv.) [4]	IN; Fairbanks
<b>Gluphisia septentrionis</b> Wlk. [1, 7]	IN; mi 140 Steese Hwy
<b>Gluphisia severa</b> Hy. Edw. [1, 2]	H
<b>Pheosia portlandia</b> Hy. Edw. [1, 2, 14]	H; KP; SC; SE; Wrangell. <b>Note 26</b>

## EREBIDAE (34)

### Subfamily Lymantriinae (3)

**Gynaephora rossii** Curt. [1, 7]

IN; NW; NS; SP; Barter Is.; Collinson Pt.; Mt. Fairplay; Omilak; Unalakleet

**Lymantria dispar** (L.) [4]

Non-resident occasionally found in pheromone traps.

**Orgyia antiqua** (L.) [1, 3, 7, 13, 14, 23]

IN; KP; SC; SW; Anan Creek; Anchorage; Bethel; King Salmon; Sterling; Willow

### Subfamily Arctiinae (21)

**Acerbia alpina** (Quensel) [1]

IN; NS; Colinson Pt.

**Acsala anomala** Benj. [1]

BR; NS

**Arctia olschwangi** Dubatolov [1]

NS; Umiat

**Arctia opulenta** (Hy. Edw.) [1, 2, 7]

IN; KI; NS; SC; SP; SW; Big Delta; Donnelly Dome; Round Island (Walrus Islands)

**Dodia albertae** Dyar [1, 2]

BR; IN; Fairbanks area; 1.5 mi S of Tok

**Eilema bicolor** (Grt.) [1]

IN

**Estigmene acrea** (Drury) [1]

IN; Fairbanks. **Note 27**

**Grammia philippiana** Fgn. [1]

AR; IN; NS

**Grammia quenseli** (Paykull) [1, 7]

BR; IN; NS; NW; Umiat

**Grammia speciosa** (Mösch.) [1, 2]

BC; IN

**Holarctia obliterateda** (Stretch) [1]

IN; Tok

**Holoarctia puengeleri sibirica** Dubatolov [1, 6]

AR; NS; NW; SP; mi 18 Teller Rd.

**Holoarctia near sordida** (McD.) [1]

AR (W. of Sheep Creek). **Note 28**

**Hyperborea czekanowskii** (Grum-Grshmailo)

[1, 6, 7]

IN; SP; Ray Mts.; Torment Ck.

**Lophocampa maculata** Harr. [4]

SE; Juneau. **Note 29**

**Pararctia lapponica** (Thunb.) [1, 2, 4, 7]

AR; BR; IN; NS; NW; PI; SP; SW; College; mi 250 Richardson Hwy; mi 28 Teller Rd.

**Pararctia subnebulosa** (Dyar) [1, 7]

AR; BR; IN; NS; NW; PI; SP; SW; St. Matthew Is.; St. Paul Is.

**Pararctia yarrowii** (Stretch)

NW, Kakagrak Hills. **Note 30**

**Parasemia plantaginis** (L.) [1, 2, 3, 4, 7, 23]

BC; IN; KI; KP; SC; SE; Anchorage; Fairbanks; Seward

**Phragmatobia fuliginosa** (L.) [1, 3, 4, 7, 23]

IN; KI; KP; NW; SC; Nogahabara Dunes

**Platarctia parthenos** (Harr.) [1, 3]

AR; IN; NT; SC; SW

### Subfamily Herminiinae (1)

**Idia species** [13]

IN; Fairbanks

### Subfamily Hypeninae (2)

**Hypena californica** Behr [1, 4, 7, 13, 23]

IN; KP; SC; Delta Jct.; Palmer; Skilak Lake; Sunrise

**Hypena decorata** Sm. [1]

H

### Subfamily Scoliopteryginae (1)

**Scoliopteryx libatrix** (L.) [1, 4, 13, 23]

BC; IN; KP; SC; Fairbanks; Willow

**Subfamily Hypenodinae (1)**

**Hypenodes palustris** Fgn. [14, 23]

KP

**Subfamily Calpinae (1)**

**Eudocima tyrannus** (Gn.)

SW:AI. **Note 31**

**Subfamily Erebinae (4)**

**Ascalapha odorata** (L.) [16]

SE; Auke Bay 12 mi N of Juneau. **Note 32**

**Caenurgina crassiuscula** (Haw.) [1, 7, 13]

AR; IN; NW; Big Delta; Fairbanks; Nogahabara Dunes

= *C. distincta* (Neum.)

**Drasteria hudsonica** (G. & R.) [1, 6, 15]

AR; IN; SC; Ft. Yukon; MP 188.6, 226 Dalton Hwy

**Drasteria petricola** (Wlk.) [2, 6, 15]

IN; NS; Ft Yukon; MP 226 Dalton Hwy

**NOLIDAE (1)**

**Nycteola frigidana** (Wlk.) [4]

BC

**NOCTUIDAE (196)**

**Subfamily Plusiinae (26)**

**Autographa ampla** (Wlk.) [1, 2]

H

IN; KP; SC; SP; Anchorage; Rampart

**Autographa buraetica** (Stgr.) [2, 4, 5, 7, 23]

IN; SC; Anchorage; Fairbanks

**Autographa californica** (Speyer) [1, 3, 6, 7, 13]

SE Panhandle; Ketchikan

**Autographa corusca** (Stkr.) [5, 6]

H; Chilkat Pass, AK/BC; Ketchikan

**Autographa metallica** (Grt.) [1, 2, 6, 7]

AR; H; IN; KI; SP; Fairbanks; Palmer; Unalakleet

**Autographa pseudogamma** (Grt.) [1, 3, 7, 13]

SC; Palmer

**Autographa sansoni** Dod [5]

H; Homer

**Plusia nichollae** (Hamp.) [2, 6]

IN

**Plusia putnami** Grt. [1]

IN; KP; Anchorage; College; Ruby; Unalakleet

**Polychrysia esmeralda** (Oberth.)

[1, 2, 3, 4, 6, 7, 23]

BC; H; IN; Fairbanks; Ketchikan; Palmer

**Syngrapha alias** (Ottol.) [1, 2, 4, 5, 7, 13]

AR; BR; NW; SP; Cape Thompson; Driftwood; Rampart

**Syngrapha alticola** (Wlk.) [1, 2, 6, 7]

KP; Cooper Landing

**Syngrapha angulidens** (Sm.) [7]

IN; SC; Ft. Yukon; Rampart

**Syngrapha borea** (Auriv.) [1, 6]

Ketchikan

**Syngrapha celso** (H. Edw.) [19]

AR; IN; EC; Denali NPP: Rampart

**Syngrapha diasema** (Bdv.) [1, 5, 6]

IN; SC; Fairbanks; Matanuska

**Syngrapha epigaea** (Grt.) [6, 7]

BR; IN; SC; Anchorage; Chatanika; Ft. Yukon; Skagway

**Syngrapha ignea** (Grt.) [1, 6, 15]

AR; BC; IN; SC; SP

**Syngrapha interrogationis** (L.) [1]

MP 57 Dalton Hwy; Naknek R., King Salmon

**Syngrapha microgamma** (Hbn.) [7, 15]

BC; IN; mi 77, Steese Hwy

**Syngrapha montana** (Pack.) [7]

BC; IN; SC; Anchorage; Ketchikan; Rampart

**Syngrapha octoscripta** (Grt.) [4, 6, 19]

Deer Mt. near Ketchikan

**Syngrapha orophila** (Hampson) [19]

SW:AI; Attu

**Syngrapha ottolenguii** (Dyar) [5, 6]

AR; BR; Umiat

**Syngrapha parilis** (Hbn.) [2, 7]

BC; IN; KP; SC; Big Delta; Ketchikan; Rampart

**Syngrapha viridisigma** (Grt.)

[1, 2, 3, 4, 5, 6, 7, 23]

## **Subfamily Pantheinae (1)**

**Panthea virginarius** (Grt.) [6]

SE; Ketchikan

## **Subfamily Acronictinae (3)**

**Acronicta lupini** (Grt.) [7, 14, 23]

KP

**Acronicta menyanthidis** (Vieweg) [1, 3, 8, 13]

AR; GB; IN; Kanuti NWR (North America record). **Note 33**

**Acronicta vulpina** (Grt.) [13]

Delta Jct.; Palmer

## **Subfamily Oncocnemidinae (5)**

**Sympistis dentata** (Grt.) [2]

IN; Fairbanks

**Sympistis funebris** (Hbn.) [2, 7]

IN; BR; Atigun Pass; MP 60 Steese Hwy; Umiat

**Sympistis heliophila** (Paykull) [1, 2, 7]

AR; BR; IN; KP; SC; Paxson; Portage; Umiat

**Sympistis lapponica** (Thunb.) [1, 2, 7]

AR; BR; NS; SC; Driftwood, Utukok River

**Sympistis nigrita zetterstedtii** (Stgr.) [1, 7]

AR; BR; IN; NW; SP; Nome; Umiat

## **Subfamily Agaristinae (2)**

**Alypia langtoni** Couper [1, 2, 3, 7]

BC; IN; SC; SE; Curry; Skagway

**Androloma maccullochii** (Kby.) [1, 2, 3, 7]

BC; IN; KP; Lawing

## **Subfamily Heliothinae (1)**

**Heliothis ononis** (F.) [7]

NW; Kobuk dunes, 90 mi E of Kotzebue

## **Subfamily Noctuinae (158)**

**Abagrotis placida** (Grt.) [4, 7, 13]

BC; IN; Delta Jct.; Fairbanks

**Actebia balanitis** (Grt.) [1, 3, 6]

BC; IN; SC; SE; Anchorage area; Matanuska

**Actebia fennica** (Tausch.) [1, 3, 6, 7]

IN; KP; Chatanika; Fairbanks; Seldovia

**Agrotis ruta** (Evers.) [1, 3, 6, 7]

AR; IN; NS; SP; SW; ANWR-Coleen River; Fairbanks; King Salmon; Paxson, 22 mi N; Rampart; Unalakleet

IN; SC; Anchorage; Fairbanks; Palmer

**Agrotis vetusta** (Wlk.) [6, 13]

SE; Alexander Archipelago, Revillagigedo Island

**Amphipoea americana** (Speyer) [7]

H; SE; Revillagigedo Island

**Anaplectoides prasina** ([D. & S.]) [2, 7]

H; IN; SE; Ketchikan

**Anaplectoides pressus** (Grt.) [2, 6]

NS; SP; MP 202-03 Dalton Hwy **Note 34**

**Anarta nigrolunata** Pack. [1, 2, 7, 14]

IN; NW; SC; SP; Delta Jct.; Fairbanks; Ft. Yukon; Omilak; Palmer

**Anarta trifolii** (Hufn.) [1, 6, 13]

IN; Fairbanks

**Anathix puta** (G. & R.) [1, 7, 13, 20]

AR; IN; SC; Fairbanks; Delta Jct.; Denali NPP; Palmer

**Andropolia contacta** (Wlk.) [1, 3, 13]

H; SC; Anchorage area; Palmer

**Apamea alia** (Gn.) [1, 2, 3, 6, 13]

SE; Ketchikan

**Apamea amputatrix** (Fitch) [6]

IN; SC; Palmer; Rampart

**Apamea cinefacta** (Grt.) [6, 13]

H; IN; SC; SE; KP; Anchorage; Delta Jct.; Fairbanks;

**Apamea cogitata** (Sm.) [1, 2, 3, 6, 7, 13, 23]

Homer; Juneau; Kodiak; Palmer; Seward

**Apamea commoda commoda** (Wlk.) [7, 13]

BC; IN; Anchorage area; Fairbanks; Palmer

**Apamea contradicta** (Sm.) [2]

SE; Devil's Mtn. Lodge

**Apamea devastator** (Br.) [1, 3, 7, 13]

IN; SE; Delta Jct.; Fairbanks; Palmer

**Apamea indocilis** (Wlk.) [6]

SE Panhandle; Ketchikan

<b>Apamea inficita</b> (Wlk.) [1, 3, 6, 7, 13]	IN; KP; SC; SE; Fairbanks; Palmer; Skagway
<b>Apamea longula</b> (Grt.) [2, 3]	IN; Fairbanks
<b>Apamea remissa</b> (Hbn.) [2, 3, 6, 7, 13]	H; IN; KP; SC; SW (below SP); Delta Jct.; Fairbanks; Homer; Matanuska; Palmer
<b>Apamea rubirena</b> (Treitschke) [6]	SW; Kukak Bay, Harriman Expedition, 1899
<b>Apamea scoparia</b> Mikk., Mustelin & Laf. [3, 6, 7, 13]	IN; SC; Delta Jct.; Anchorage area; Fairbanks; Palmer; Rampart H; SC; SE; Palmer; Sitka
<b>Apamea sordens finitima</b> (Gn.) [2, 6, 13]	H; SC; SE; Ketchikan; Palmer; Sitka
<b>Apamea vultuosa</b> (Grt.) [6, 13]	St. Paul Island
<b>Apamea zeta pelagica</b> Mikk. [7]	AR; IN; KP; Denali NPP
<b>Apamea zeta nichollae</b> Hamp. [6]	IN; Fairbanks
<b>Brachylomia algens</b> (Grt.) [13]	Caradrina montana (Bremer) [1, 2, 3, 7, 13, 20] AR; BC; IN; Big Delta; Fairbanks
<b>Cerastis enigmatica</b> Laf. & Crabo [6, 7]	SE Panhandle; Ketchikan
<b>Cerastis salicarum</b> (Wlk.) [3, 6, 7]	KP; SC; SE; Anchorage area; Hope; Ketchikan
<b>Chersotis juncta</b> (Grt.) [1, 3, 6, 7]	IN; SC; Fairbanks; Palmer
<b>Coenophila opacifrons</b> (Grt.) [2, 4]	BC (Alaska record, 27 July, 2012)
<b>Copablepharon alaskensis</b> Crabo & Laf. [7, 20]	NW (Kobuk and Nogahabara Dunes)
<b>Coranarta luteola</b> (G. & R.) [2, 7, 15]	AR; BC; IN; Big Delta; MP 284.5 Dalton Hwy; MP 115 Steese Hwy
<b>Coranarta macrostigma</b> (Laf. & Mikk.) [2, 7]	BC; IN; Fairbanks
<b>Cucullia strigata</b> (Sm.) [6]	SE; Ketchikan
<b>Diarsia dislocata</b> (Sm.) [3, 7, 13]	IN; KP; Delta Jct.; Fairbanks; Hope
<b>Diarsia esurialis</b> (Grt.) [2, 3, 6, 13]	H; IN; KP; PI; SE; SC; SW; Anchorage; Delta Jct.; Ft. Wrangel; Ketchikan; Palmer;
<b>Diarsia rosaria</b> (Grt.) [3, 4, 7, 13, 23]	IN; KI; KP; SW; Anchorage; Fairbanks; Naknek; Palmer
<b>Enargia infumata</b> (Grt.) [3, 4, 7, 13, 20, 23] = <i>E. mephisto</i> Franc.	IN; KP; SC; SW; Delta Jct.; Fairbanks; King Salmon; Pt. MacKenzie
<b>Eremobina claudens</b> (Wlk.) [3, 6, 7]	AR; IN; Fairbanks; Paxson, 22 mi N
<b>Eurois astricta</b> Morr. [1, 2, 3, 6, 7, 13, 23]	BC; H; IN; KI; KP; SC; SE; Fairbanks; Ketchikan; Kodiak; Palmer
<b>Eurois nigra</b> (Sm.) [1]	SC
<b>Eurois occulta</b> (L.) [1, 2, 3, 4, 13, 23]	BC; H; IN; KP; SC; Anchorage; Delta Jct.; Fairbanks; Palmer; Willow
<b>Euxoa adumbrata thanatologia</b> (Dyar) [3, 4, 7]	Anchorage; to western Alaska
<b>Euxoa aequalis</b> (Harv.) [13]	IN; Delta Jct.
<b>Euxoa campestris</b> (Grt.) [3, 23]	SE; KP
<b>Euxoa comosa</b> (Morr.) [1, 2, 7, 13]	AR; BC; KP; SP; Fairbanks; Homer; Paxson, 22 mi N; Unalakleet
<b>Euxoa cursoria wirima</b> Hdwk. [13]	IN; Delta Jct.
<b>Euxoa declarata</b> (Wlk.) [7]	IN; Fairbanks
<b>Euxoa divergens</b> (Wlk.) [?]	Eastern Alaska
<b>Euxoa hyperborea</b> Laf. [7]	NS; Chandler River; Nogahabara Dunes
<b>Euxoa idahoensis</b> (Grt.) [1]	IN; Fairbanks
<b>Euxoa infausta</b> (Wlk.) [6]	H
<b>Euxoa nomas</b> (Ersch.) [1, 6]	SE to NW Alaska; Mt. Dewey
<b>Euxoa ochrogaster</b> (Gn.) [1, 3, 4, 7, 13]	BR; IN; KP; SC; SP; Anchorage; Fairbanks; Delta Jct.; Palmer; Unalakleet
<b>Euxoa ridingsiana</b> (Grt.) [1, 7, 13]	IN; Fairbanks; Palmer
<b>Euxoa rufula</b> (Sm.) [2]	H
<b>Euxoa servita</b> (Sm.) [2]	BC
<b>Euxoa tessellata</b> (Harr.) [3, 13]	IN; Fairbanks; Palmer

<b>Feltia beringiana</b> (Laf. & Kono.) [2, 6, 7]	NS; Sagwon Hills; Schrader Lake
<b>Feltia boreana</b> (Laf.) [2, 6, 15]	BR; NS; Ivotuk Hills; Schrader L.; MP 226 Dalton Hwy
<b>Feltia jaculifera</b> (Gn.) [7]	East central Alaska; Big Delta
<b>Feltia nigrita</b> (Graeser) [?]	NW
<b>Feltia woodiana</b> (Laf.) [6, 15]	IN; MP 298.5 Dalton Hwy
<b>Graphiphora augur</b> (F.) [1, 2, 3, 4, 7, 13, 19, 23]	BC; H; IN; KI; KP; SC; Anchorage; Fairbanks; Delta Jct.; Ketchikan; Kodiak; Palmer
<b>Hada sutrina</b> (Grt.) [6, 13]	SC; Matanuska; Palmer
<b>Hillia iris</b> (Zett.) [1, 7, 20]	AR; IN; Delta Junction; Fairbanks; Paxson, 22 mi N
<b>Hillia maida</b> (Dyar) [1, 4, 13]	BC; IN; Fairbanks
<b>Hypocoena basistriga</b> (McD.) [1]	IN; SW
<b>Hypocoena stigmatica</b> (Evers.) [6]	SC; Virgin Bay
<b>Hyppa brunneicrista</b> Sm. [4, 13]	IN; SW:AI; Delta Jct.; Fairbanks; Palmer
<b>Hyppa contrasta</b> McD. [13]	IN; KP; Delta Jct.; Palmer. <b>Note 35</b>
<b>Isochlora sericea</b> (Laf. & Kono.) [7]	NW (Driftwood, Utukok R.)
<b>Lacanobia nevadae</b> (Grt.) [3, 7, 13]	IN; KP; SC; Fairbanks; Palmer; Seward
<b>Lacanobia radix</b> (Wlk.) [13]	IN; Delta Jct.
<b>Lacinipolia anguina</b> (Grt.) [13]	IN; Delta Jct.
<b>Lacinipolia olivacea</b> (Morr.) [2, 6, 13]	H; KP; SC; Fairbanks; Matanuska
<b>Lasionycta coracina</b> Crabo & Laf. [6, 7]	NW (Cape Thompson)
<b>Lasionycta illima</b> Crabo & Laf. [7]	Eastern Alaska; MP 315 Richardson Hwy
<b>Lasionycta leucocycla albertensis</b> (McD.) [2, 7]	NW; SC; Big Delta; Kotzebue
<b>Lasionycta mutilata</b> (Sm.) [19]	SE; Panhandle; Deer Mt. S. of Ketchikan
<b>Lasionycta perplexa</b> (Sm.) [7]	SC; Anchorage area
<b>Lasionycta phaea</b> (Hamp.) [1, 6]	BR
<b>Lasionycta quadrilunata yukona</b> Laf. [6]	AR; Denali NPP
<b>Lasionycta staudingeri preblei</b> (Benj.) [6, 20]	SW:AI; Western Alaska; St. Paul Is.
<b>Lasionycta taigata</b> Laf.	SW; Snipe Lake, Lake Clark NP. Photograph of live moth; 2012 Alaska record.
<b>Lasionycta subfumosa</b> (Gib.) [7]	SP; Omilak
<b>Leucania dia</b> (Grt.) [3, 6, 13]	IN; SC; SE; Delta Jct.; Fairbanks; Ketchikan; Palmer
<b>Litholomia napaea</b> (Morr.) [1, 4, 7, 13, 20, 23]	IN; KP; SC; Fairbanks; Palmer; Sunrise
<b>Lithomoia germana</b> (Morr.) [1, 2, 3, 13]	IN; KP; Fairbanks
<b>Lithophane georgii</b> Grt. [2, 13]	IN; Fairbanks
<b>Lithophane pexata</b> Grt. [1, 3, 7, 13]	IN; Fairbanks
<b>Lithophane thaxteri</b> Grt. [1, 13]	IN; KP; College; Fairbanks
<b>Melanchra pulverulenta</b> (Sm.) [13, 7, 15, 19]	IN; SC; SP; Curry; Delta Jct.; Fairbanks; MP 226 Dalton Hwy; Ketchikan; Palmer; Unalakleet
<b>Mniotype ducta</b> (Grt.) [3, 6, 13]	IN; SC; Fairbanks; Matanuska; Palmer
<b>Mniotype tenera</b> (Sm.) [3, 6, 7, 13, 19]	IN; KP; PI; SC; Fairbanks; Ketchikan; Matanuska; Palmer; Seward; Sterling
<b>Mythimna oxygala</b> (Grt.) [6]	SE; Ketchikan
<b>Mythimna yukonensis</b> (Hamp.)	
[1, 2, 3, 7, 13, 23]	H; IN; KP; NW; SC; SP; Anchorage; Delta Jct., Fairbanks; Palmer; Unalakleet
<b>Neoligia sub juncta</b> (Sm.) [2]	H
<b>Noctua pronuba</b> (L.) [3, 4]	KP; SC; SE
<b>Ochropleura implecta</b> Laf. [6, 7]	SE; Ketchikan
<b>Orthosia hibisci</b> (Gn.) [2, 4, 6, 13]	IN; SC; SE; SW; Anchorage; Delta Jct.; Fairbanks; Ketchikan; King Salmon; Palmer; Turnagain
<b>Orthosia revicta</b> (Morr.) [6]	SE; Ketchikan
<b>Papestra cristifera</b> (Wlk.) [1, 6]	IN; SC; Matanuska

<b>Papestra quadrata</b> (Sm.) [1]	IN
<b>Parabarrovia keelei</b> Gib. [1, 7]	AR; IN; NS; Chandler Lake
<b>Parabarrovia omilaki</b> Laf. [7]	SP; Darby Mts
<b>Paradiarsia littoralis</b> (Pack.) [6, 15]	IN; East central; MP 226 Dalton Hwy; Ramparts
<b>Parastichtis suspecta</b> Hbn. [1, 2, 4, 7, 13]	IN; SC; Anchorage; Dalton Hwy at Fish Creek; Delta Jct.; Fairbanks area; Ft. Richardson; Palmer; Rampart
<b>Peridroma saucia</b> (Hbn.)	<b>Note 36</b>
<b>Phlogophora periculosa</b> (Gn.) [19]	SE; Ketchikan
<b>Polia nimbosa</b> (Gn.) [2]	H
<b>Polia purpurissata</b> (Grt.) [1, 2, 4, 13]	BC; H; IN; SC; Delta Jct.; Palmer
<b>Polia richardsoni</b> (Curt.) [1, 2, 7, 15]	AR; BR; IN; NS; NW; SP
<b>Polia rogenhoferi</b> (Mösch.) [13]	IN; Delta Jct.
<b>Protolampra rufipectus</b> (Morr.)	
[1, 2, 3, 4, 7, 13, 19]	BC; EC; H; IN; Delta Jct.; Fairbanks; Ketchikan; Palmer
<b>Proxenus mendosa</b> McD. [2, 7]	SC; IN; Chatanika
<b>Psammopolia arietis</b> (Grt.) [6]	SW; Kukak Bay (1 record)
= <i>P. etacta</i> (Sm.)	
<b>Pseudohermonassa flavotincta</b> (Sm.) [1, 2, 3]	SE; KP
<b>Pseudorthodes irrorata</b> (Sm.) [2]	H
<b>Resapamea</b> species [7]	SP; Unalakleet. <b>Note 37</b>
<b>Spaelotis clandestina</b> (Harr.) [1, 3, 7, 13]	IN; KP; Delta Jct.; Palmer
<b>Sunira bicolorago</b> (Gn.) [3, 13]	IN; KP; Delta Jct.; Sterling
<b>Sunira verberata</b> (Sm.) [1, 2, 3, 4, 6, 7, 13, 23]	H; KP; SC; SW (Alaska Pen.); Ft. Richardson; Matanuska; Naknek Lake
<b>Ufeus hulstii</b> Sm. [1, 6, 7]	IN; SC; Palmer
<b>Xanthia tatago</b> Laf. & Mikk. [?]	<b>Note 38</b>
<b>Xestia aequaeva</b> (Benj.) [1, 6, 7]	BR; IN; NS; SP; SW; Nome; Eagle Summit; Schrader Lake
<b>Xestia alaskae</b> (Grt.) [1, 2, 3, 6, 7, 15]	AR; BR; IN; NS; NW; PI; SP; SW; St. George Is.; Cape Thompson; Chandler Lake; Nome; St. George Is.; St. Paul Is.
<b>Xestia albuncula</b> (Evers.) [1, 2, 7]	BR; IN; KP; NS; PI; SW:AI; Big Delta
<b>Xestia atrata</b> (Morr.) [6]	IN; Rampart
<b>Xestia bryanti</b> (Benj.) [1, 2, 7, 15]	BR; IN; NE; NS; NW; SC; SE; Chandler Lake; Juneau; Eagle Summit; Schrader Lake
<b>Xestia c-nigrum</b> (L.) [1, 2, 7, 13, 23]	H; IN; KI; KP; SC; SE; SP; Palmer; Unalakleet
<b>Xestia fergusoni</b> Laf. [6]	SP; Shishmaref
<b>Xestia finatimis</b> Laf. [2]	H
<b>Xestia homogena</b> (McD.) [1, 7]	AR; EC; IN; KP; Big Delta
<b>Xestia intermedia</b> (Kono.) [7]	SP; Nome, Bonanza Hill
<b>Xestia inuitica</b> Laf. & Hensel [7]	BR; MP 265 Dalton Hwy; 68°23'48", 149°23'53"
<b>Xestia liquidaria</b> (Evers.) [1, 6, 7]	BR; NE; NS; NW; Barter Is.; Cape Thompson; Chandler Lake; Pt. Barrow
<b>Xestia lorezi</b> (Stgr.) [7]	SC; Hatcher Pass near Palmer
<b>Xestia lupa</b> Laf. & Mikk. [6]	AR; Denali NPP
<b>Xestia lyngei</b> (Rebel) [1, 6, 7, 20]	IN; BR; NW; SP; Cape Thompson; Omilak (Darby Mts.); Schrader Lake
<b>Xestia mixta</b> (Wlk.) [21]	SE; Whale Pass, 45 mi S Petersburg
<b>Xestia oblata</b> (Morr.) [2]	H
<b>Xestia okakensis</b> (Pack.) [6]	AR; NW; SC; Denali NPP
<b>Xestia perquiritata</b> (Morr.) [2, 23]	H; KP
<b>Xestia quieta</b> (Hbn.) [1]	BR
<b>Xestia smithii</b> (Snell.) [1, 2, 3, 4, 7, 13, 19; 23]	BC; H; IN; KP; SC; Fairbanks; Delta Jct.; Ketchikan; Palmer
<b>Xestia speciosa</b> (Hbn.) [6, 7]	AR; IN; KP; SP; Fairbanks; Denali NPP; Seward

<b>Xestia tecta</b> (Hbn.) [1, 2, 7]	IN; KP; NW; SC; SP; SW; Big Delta; Nome; Portage; Unalakleet
<b>Xestia wockei troubridgei</b> Laf. [2, 18]	AR; NW
<b>Xestia woodi</b> Laf. & Kono. [7]	BR; Noluck Lake
<b>Xylena cineritia</b> (Grt.) [13]	IN; Fairbanks
<b>Xylena nupera</b> (Lint.) [4, 13]	KP; SC; SE; Anchorage; Sitka
<b>Xylena thoracica</b> (Putnam-Cramer) [1, 2, 3, 4, 6, 7, 13]	IN; SC; College; Delta Jct., Fairbanks; Matanuska
<b>Xylotype arcadia</b> B. & Benj. [1, 2, 7, 20]	BC; IN; Fairbanks

### Species needing verification by voucher specimens and specious records

The species noted below have been cited in various ambiguous sources as occurring in Alaska. We have found no voucher material in collections. Several of the species have been recorded from central British Columbia and might reasonably be expected to occur in the panhandle of southeastern Alaska.

- Gelechiidae:** *Scrobipalpula henshawiella* (Bsk.) was inadvertently stated to occur in Alaska, (Lafontaine & Wood, 1997). There are no Alaska records, but the moth may ultimately be found in Alaska since it does occur in the Yukon Territory.
- Tortricidae:** *Cydia leucobasis* (Bsk.) IN
- Sphingidae:** *Sphinx luscitiosa* Clem. IN A dot placed in the middle of a map of Alaska in Riotte (1980), but no text mention of Alaska, only Yukon Territory with no map dot, suggesting a plotting error.
- Geometridae:** *Drepanulatrix monicaria* (Gn.) Panhandle. *Ceanothus*, the larval host for *Drepanulatrix* does not occur in Alaska.  
*Ematurga amitaria* (Gn.) [highly doubtful]  
*Gabriola dyari* Tayl. [highly doubtful]  
*Hydriomena nubilofasciata* (Pack.) [4] Anchorage. A misidentification since the larvae feed on oak, which does not occur in Alaska. Accompanying data indicated association with willow. A photograph of a badly worn specimen was examined (by CDF). The abdomen of the moth was missing, but the habitus suggested one of the forms of *H. furcata*, which is a willow feeder.
- Noctuidae:** *Acronicta impressa* Wlk. Previous Alaska records for this species are misidentifications of *A. menyanthidis* (see Note 33), but *A. impressa* is known from the Yukon Territory and may ultimately be found in Alaska.  
*Euxoa munis* (Grt.). Specimens from southeastern Alaska brought to the CNC by a visiting collector were seen by JDL some years ago, but no vouchers were left and the specimens cannot now be located in any depository.  
*Lasionycta secedens bohemani* (Stgr.). Known from the Yukon Territory adjacent to the Alaska border. Occurrence in Alaska was erroneously reported in Crabo & Lafontaine (2009).

### Notes

- There has been considerable confusion between *Argyresthia calliphanes* and *A. goedartella*, and Alaska records may all pertain to *goedartella*.
- The type of *Gnorimoschema valesiella alaskense* will be in the Povolny collection. Dr. Povolny is deceased and the location of his collection is not known to the authors. *Gnorimoschema alaskense* was raised to species status by Huemer and Karsholt (2010).
- The CNC has paratypes of a species that is being described by J. B. Heppner (monograph in preparation with projected publication in 2013).
- The species formerly considered to be *Acleris emargana blackmorei* Obr. has now been assigned to *A. effractana* (Karsholt et

- al., 2005).
5. *Aphelia septentrionalis* Obr. was described from three Alaska specimens with the holotype placed in AMNH. Two paratypes were placed in USNM. Razowski subsequently described the two paratypes as *A. gregalis* based on minor genitalic differences from *septentrionalis*. Additional study is necessary to determine if *gregalis* is distinct from *septentrionalis*.
  6. *Apotomis spinulana*. The locality was cited in Adamski & Peters (1986) as “mile 250 of Alaskan highway” which is in British Columbia, Canada. The dot in the distribution map is placed in interior Alaska. The citation might apply to mile 250 of the Richardson Hwy for which we have other species records. We have not been able to verify occurrence in Alaska, or to find a voucher specimen.
  7. *Epinotia crenana* (Hbn.). Reported from Alaska, but all specimens examined by CDF have 11–14 cornuti (or sockets thereof) in the phallus characteristic of *A. columba*, whereas *A. crenana* has 21–25.
  8. There is one old specimen in the USNM that apparently accounts for the distribution record in Heinrich (1928).
  9. *Zeiraphera vancouverana*. A series of this species has been taken twice at Dutch Harbor; first from Sitka spruce in late July, 1981 and then again in a pheromone trap during mid-summer, 2009. Sitka spruce, a known larval host, was introduced into Unalaska in the early 1800s, and perhaps the moth along with the plants.
  10. *Paranthrene robiniae*, *Synanthedon* species. Eichlin TD & Duckworth WD, 1988. Fascicle 5.1 in The Moths of America North of Mexico; see R. W. Hodges in the **References** for the series citation.
  11. *Dioryctria reniculella*. We follow the treatment of Heinrich (1956) and treat *Dioryctria reniculella* and *D. abietivorella* as distinct species based upon differences in the genitalia.
  12. *Plodia interpunctella*. This species occurs in stored grain and seeds, such as bird seed mix, and has been found in Alaskan households. The moth occurs worldwide.
  13. The specimens were not available for dissection and may be *Dysstroma hersiliata*. These two species can be separated only by dissection.
  14. In the past, Alaskan material has been identified as *Dysstroma walkerae* (Pears.), which is an eastern species.
  15. *Epirlita undulata*. Based on recent barcoding (*fide* B. C. Schmidt), the supposed differences that Harrison used to separate *E. undulata* from North American *E. autumnata* do not hold up, and the two taxa barcode as one species, but differently from true European *E. autumnata* (Bkh.). *Epirlita undulata* (Harrison) is thus the name available for North American material, Pohl et al. (2010).
  16. *Lobophora nivigerata*, *L. simsata* and *L. magnoliatoidata* all barcode identically (*fide* B. C. Schmidt, CNC) and represent a single species. The name *nivigerata* has publication priority.
  17. The species formerly identified in northwestern North America as *Psychophora Suttoni*, which is an eastern species, represents a complex of at least six species in Alaska that includes both diurnal and nocturnal species. A revision is being prepared by B. C. Schmidt (CNC).
  18. These two species are frequently difficult to separate without examining the genitalia. See Ferris (2007) for illustrations of the adults and genitalia.
  19. Northwestern specimens that have been called *Sicya crocearia* Pack. represent a form of *S. macularia*, and it remains to be determined if *S. crocearia* from California and Nevada is a valid species.
  20. Synonymization in Pohl et al., (2010).
  21. Formerly *Epiranthis substriataria danbyi*; elevated to species status by Schmidt and Anweiler, 2010.
  22. The taxonomic status of *Xanthorhoe borealis* is uncertain and dissection of the holotype will be necessary to determine if *X. baffinensis* is just a form of it.
  23. *Malacosoma californicum* is not a resident species, but reintroductions are possible.
  24. *Hemaris thetis* was revised to full species status by Schmidt, 2009. *Smerinthus ophthalmica* was removed from synonymy and elevated to full species status by Schmidt in Pohl, 2010.
  25. Presumed to have been introduced in “tomato starts” shipped to a greenhouse springtime plant seller. Mature larva 25 July, 2009; adult 15 June, 2010. Establishment in Alaska is unlikely.
  26. There are two phenotypes (the white-patched “*rimosa*” and the dark *P. portlandia*) that occur in Alaska. They have identical male and female genitalia, but quite different genitalia from more eastern *P. rimosa* Pack. Ultimately another available name will most probably replace *portlandia*.
  27. An adult female specimen was found in the kitchen of a Fairbanks residence in mid-April, 2012. It may have been introduced in some grocery produce brought into the house. The moth could become established in the state since the known larval host, *Melilotis officinalis* (L.) Lam. (= *M. albus* Desr.) (sweetclover) is fairly widely distributed in Alaska, including the Fairbanks area.
  28. *Holoarcia near sordida*. This moth is an undescribed species being described by B. Christian Schmidt (CNC).
  29. Records and distribution information will be found in Holsten et al. (2001).
  30. *Pararctia yarrowii*. Record based on a photograph taken in June, 2010 of a live adult in Cape Krusenstern National Monument.
  31. *Eudocima tyrannus*. A live adult of this species was photographed (and released) on 23 June, 2001 by USFWS personnel on Buldir Island in the Aleutian chain. The specimen appeared to be very fresh and perhaps was transported as a pupa in fruit brought into the area, rather than entering as a stray adult (Kruse, 2002).
  32. *Ascalapha odorata*. This species is native to the extreme southern United States and Mexico, but adults are known to travel as strays over great distances northward well beyond their normal habitat. The one record is for 4 October, 1957.
  33. Previously, *Acronicta menyanthidis* has been misidentified in Alaska as *Acronicta impressa* Wlk.
  34. *Anarta nigrolunata*. Formerly associated with the Old World *Anarta melanopa* (Thunb.).
  35. *Hyppa contrasta*. *Hyppa rectilinea* (Esper), an Old World species, was recorded by the Harriman Alaska Expedition from Kukak Bay and is a misidentification of the very similar *H. contrasta*.

- 36. *Peridroma saucia*. Occasional migrant, non-resident.
- 37. Two species occur in the Yukon Territory, *Resapamea passer* and an undescribed species distinct (in genitalia) from *R. hedeni* (Graeser) from Russia. There is an unidentified female in the CNC that looks closer to the undescribed species, but the reniform spot is very narrow, unlike either of the other two.
- 38. *Xanthia tatago*. Based on distribution statement of “Alaska” in Lafontaine & Mikkola, 2003.

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