

Survey of Lepidoptera in the Canadian Shield Ecoregion of northeastern Alberta

III. 2002 Survey of Colin-Cornwall Lakes Wildland Park

prepared for the Alberta Natural Heritage Information Centre,
Parks and Protected Areas Division,
Alberta Community Development

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April 16, 2002

ERRATA

While curating the specimens listed in this report prior to incorporating them into the Strickland Museum collection and database at the University of Alberta, the following errors were noted and corrected. The species mentioned below are highlighted in yellow in Appendix 1 and 2 of this report.

Geometridae

Selenia alciphearia. Single specimens of *Selenia* collected at Colin Lake on June 6 and 7 and reported as *Selenia kentaria* have been dissected and re-identified as the very similar *Selenia alciphearia*. *S. alciphearia* is a common widespread species in Alberta while *S. kentaria* is much less common and appears to be restricted to settled areas along the southern edge of the boreal forest.

Noctuidae

Papestra quadrata. Three moths collected at Colin Lake on June 8th (1 specimen) and June 12th (2 specimens) and identified as *Trichordestra liquida* have been re-identified as *Papestra quadrata*. Both species are common, widespread species.

Coranarta macrostigma. A specimen of *Coranarta* taken at Colin Lake on June 6th has been dissected and identified as a female of the much rarer *Coranarta macrostigma*. The other specimens of *Coranarta* collected at Colin Lake are correctly identified as *C. luteola*. *C. macrostigma* has been reported from a number of sites in the mountains and foothills of southern Alberta, and in dunes east of Edgerton. It is also known to occur in the western arctic/subarctic, east to Great Bear Lake. [Note: until recently, the genus was *Anarta*, not *Coranarta*].

Orthodes goodelli. A single specimen of *Orthodes goodelli* collected at Colin Lake on July 7th has been dissected and re-identified as *Polia detracta*. Both are widespread species in Alberta.

Gary Anweiler
January 31, 2004



Figure 1. *Callophrys eryphon eryphon* sitting on *Picea* branch near camp.

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Introduction

In Alberta, the Canadian Shield Ecoregion is restricted to the extreme northeast part of the province (Beckingham and Archibald 1996; Strong and Leggat 1992). It is subdivided into the Kazan Upland Subregion and the Athabasca Plain Subregion, located to the north and to the south of Lake Athabasca, respectively. There are several wildland parks that have recently been established in these two subregions.

A Lepidoptera survey was conducted in the summer of 2000 (Schmidt and Pohl 2000) in the Maybelle River, Marguerite River and Richardson River Dunes Wildland Parks, which are located in the Athabasca Plain Subregion. In the summer of 2001, two wildland parks located in the Kazan Upland Subregion were surveyed (Macaulay and Pohl 2002), namely La Butte Creek and Fidler-Greywillow. These surveys were the first for all of these parks.

Colin-Cornwall Wildland Park, within the Kazan Upland Subregion, was the focus of a Lepidoptera survey in the summer of 2002. Colin-Cornwall is located about 35 km north of Lake Athabasca near the Alberta-Saskatchewan border. The subregion in which this wildland park is located contains extensive riparian, lakeshore and shield outcrop habitats. The purpose of the survey was to provide an annotated summary of some of the Lepidoptera species that occur in the park, including notes on such parameters as relative abundance, distribution patterns, range extensions and any other relevant biological or behavioral information. The information obtained contributes towards an increased understanding of the Lepidoptera fauna found within this wildland park but also within the broader context of Alberta.

Materials and Methods

The Lepidoptera survey was conducted within Colin-Cornwall Wildland Park from June 6 to 14, and July 6 to 10, 2002. The June survey was conducted by Douglas Macaulay, Ted Johnson and Wayne Nordstrom. Lorna Ash, Duncan Hilchie, Gerald Hilchie, Terri MacKinnon and Wayne Nordstrom conducted the July survey.

Specimens were collected via hand netting during daylight hours and at dusk. At night, specimens were collected at a sheet illuminated by a 175-Watt mercury vapour light powered by a portable generator, and in four 25-Watt 12V DC battery powered ultraviolet light traps. Attempts were made to sample as many habitats as possible. Exact coordinates of collection sites are listed in Table 1.

Table 1: Habitats and locations of collection sites.

Site No.	Habitat	Location	Coordinates
Colin-Cornwall Wildland Park:			
1	BS	Colin Lake E, sand beach	59.58° N 110.06° W
2	OF	Colin Lake SE, open forest	59.53245° N 110.02230° W
3	BS	Colin Lake W, beach	59.56243° N 110.22321° W
4	SB	Colin Lake W, bog	59.57708° N 110.22232° W
5	RO	Esker Lake S, burn & rock outcrop	59.54148° N 110.28350° W
6	RO	Esker Lake S, rock outcrop	59.53560° N 110.26940° W
7	SB	Esker Lake SW, bog & shrubby wetland	59.53336° N 110.30593° W
8	RF	Esker Lake, basecamp	59.55533° N 110.26314° W
9	SB	Esker Lake, bog 100m SE of basecamp	59.55504° N 110.26177° W
10	SB	Esker Lake, bog 800m NW of basecamp	59.55748° N 110.27329° W
11	OF	Esker Lake, old growth forest 300m SE of basecamp	59.55363° N 110.26167° W
12	SE	Esker Lake, sand esker 500m NW of basecamp (Figure 1)	59.55898° N 110.26923° W
13	SE	Esker Lake, sand esker 4 km W of basecamp	59.55170° N 110.31406° W
14	SE	Esker Lake, grassy ridge SE of basecamp	59.55140° N 110.25415° W
15	RF	Esker Lake, lakeshore 4km W of basecamp	59.54445° N 110.32885° W
16	RF	Esker Lake, outlet	59.54787° N 110.25004° W
17	RO	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54351° N 110.31531° W
18	RO	Woodman Lake E, rock outcrop nr. outlet	59.54934° N 110.43033° W
19	SB	Woodman Lake, bog at point	59.55039° N 110.48713° W
20	RF	Woodman lake nr outlet, stream hill	59.55434° N 110.47104° W
21	RF	Woodman Creek, riparian area	59.54502° N 110.38846° W

Specimens were identified by the authors using Covell (1984), Handfield (1999), Rockburn and Lafontaine (1976), McGuffin (1977), Lafontaine and Poole (1991), Lafontaine (1998), Schmidt (2000) and a variety of pertinent taxonomic publications, as well as reference collections possessed by the Canadian Forest Service's Northern Forestry Centre, University of Alberta's Strickland Museum and members of the Alberta Lepidopterists' Guild. Higher classification follows Kristensen (1999) and nomenclature follows Poole (1996), except where noted. Voucher specimens have been deposited at the Northern Forestry Centre and the Strickland Museum.

Results

A total of 437 Lepidoptera specimens, belonging to 21 families and 138 species, were collected. Of these, 20 species were butterflies, 66 were macro-moths and 52 were micro-moths. Eleven species are considered to be uncommon. A species list and collection summary appears in Appendix 1; full collection data appears in Appendix 2.

Many more specimens and species were collected in the 2001 La Butte / Fidler Greywillow survey than in the present survey (Table 2). Of the 303 different species collected in the two surveys combined, only 63 species (20.8%) were shared between them. A large proportion (54%) collected in the 2001 La Butte Creek / Fidler Greywillow survey were not collected at Colin-Cornwall, while only 25% of species collected in Colin-Cornwall were not collected in the 2001 survey.

Table 2. Abundance and Diversity of the 2001 and 2002 Wildland Park samples.

Survey	No. Specimens	No. Species	No. Unique to Park
2001- La Butte / Fidler- Greywillow	542	228	165
2002 - Colin-Cornwall	437	138	75



Figure 2. South-facing slope of the sand esker located on the north shore of Esker Lake (Site 12).

Discussion

I. Factors affecting the Survey

Although 138 species were collected in this survey, it represents only a small portion of the 1311 species expected to occur in the region. Many Lepidoptera species are active as adults for a short portion of the season. Thus a complete survey of adult Lepidoptera would require regular collecting (approximately every 10 to 14 days) through the entire flight season, from the end of April until late September. As well, Lepidoptera species are often localized in particular microhabitats, some of which were not accessible on this survey. Despite these limitations, a large number of specimens and species were collected in the survey.

II. Comparison to the 2001 Survey

The parks surveyed in 2001 are in the same ecological subregion as Colin Cornwall Park, and the survey dates were very similar. However, fewer specimens and species were collected in the Colin Cornwall survey than in the La Butte Creek/Fidler-Greywillow survey (Table 2). This is likely due to a combination of factors including weather and environmental conditions, sampling differences, and habitat differences.

The weather in both June and July of 2002 may have led to the reduced species counts. The June survey at Colin-Cornwall was affected by a late spring. Rafts of crumbling ice were still present on Colin Lake on June 9th. About two or three days later, however, most of the ice had melted while the weather remained cool. Thus the peak spring emergence of Lepidoptera occurred after the end of the June survey. In comparison, the region experienced considerably warmer temperatures and relatively normal weather in 2001, which resulted in the collection of many more species of lepidoptera then.

In July 2002, the hot and dry weather conditions throughout the shield area in northeast Alberta led to numerous forest fires. For safety reasons, the base camp was evacuated on July 10th. This reduced the collecting period for lepidoptera by about 10 days, a factor that likely contributed to a lower species count than in 2001.

Given the large size of Colin-Cornwall Wildland Park, collection efforts for lepidoptera were concentrated on those habitats that were accessible. These habitats primarily included: lake shorelines, backshore forests, backshore shrublands, rock outcrops, and the ‘sand esker’ (Figure 2) on the north shore of ‘Esker Lake’. A wider diversity of habitats were studied while at La Butte Creek/Fidler-Greywillow Wildland Parks, including: riparian areas (both river and stream), marshes, upland forests, meadows and beaver ponds. A greater sampling effort in habitats other than lakeshore or near lakeshore at Colin-Cornwall would likely add to the species complement for this park. This is because its lakeshore habitats probably harbor fewer species than its forest, interior wetland and other habitats.

There was very little overlap (20.8%) in species collected on the 2001 and 2002 surveys. This is partly due to the weather and sampling differences discussed above. However, it also indicates

that there is an incredible diversity of habitat types across the Kazan Upland subregion, and that there is little duplication of habitats among these parks.

III. Species Richness

Although this survey collected a large number of Lepidoptera species, many more undoubtedly occur in the area. The butterfly fauna of the Kazan Uplands is fairly well known. The distribution records in Layberry et al. (1998) indicate that 59 species are known or expected to occur in the region. However, the moth fauna is almost completely unknown. Most previous moth records were gathered by the Forest Insect and Disease Survey of the Canadian Forest Service, which surveyed forest pests along the Slave River and in the vicinity of Fort Smith (McGugan 1958, Prentice 1962, 1963, 1965). The total number of Lepidoptera species expected to occur in the Kazan Uplands was extrapolated from the butterfly fauna, using the proportions of butterflies, macro-moths, and micro-moths expected to occur in a northern temperate region (Varis et al. 1987); Table 3. Overall, the survey collected approximately 10.5% of the Lepidoptera expected to occur in the region. Butterflies were more completely sampled than the moths, due to the fact that they are conspicuous and highly mobile. The micro-moths were the least thoroughly sampled, due to their inconspicuous nature and close habitat associations.

Table 3: Diversity of sampled Lepidoptera, and total expected diversity of the Kazan Upland subregion. Expected proportions of species are from Varis et al. (1987); expected number of butterfly species is based on Layberry et al. (1998) and Bird et al. (1995). Other values are extrapolated.

Taxonomic group	No. Spp. collected	Expected % of all Lepidoptera spp.	Expected No. spp.	% collected
Butterflies	20	4.5	59	33.9
Macro-moths	66	35.5	465	14.2
Micro-moths	52	60	787	6.6
Total	138	100	1311	10.5

IV. Distribution patterns and taxa of particular interest

The majority of the species collected in the survey are typical boreal species occurring across northern North America. However, some elements of other faunas were collected as well, including some from the mountainous regions of Alberta, and others more commonly collected in the grasslands. Many records provided substantial range extensions (>500 km), providing valuable information for a region that has had limited Lepidoptera sampling in the past.

The following section contains details of notable range extensions or other significant records, including locality and habitat information from the present survey, and relevant biological or behavioral information from published sources, where available. As well, we have included an indication of the species' general abundance in Alberta, as "abundant", "common", "uncommon", or "rare". Because many of these species are known from fewer than 20 records in Alberta, these categories are based on the authors' experience rather than exact counts of observations or collection specimens. The list is broken down into three parts; butterflies, macro-moths, and micro-moths.



Figure 3. Rock outcrop at Woodman Lake.

A. Butterflies:

Range and biological information is from Bird et al. (1995) and Layberry et al. (1998).

PAPILIONIDAE

Papilio machaon hudsonianus - An uncommon species that exists in localized populations across the boreal forest. This specimen was found patrolling the sand esker 500 m northwest of camp (Site 12). This is the most northern record for Alberta though it exists in the NWT and Yukon.



Figure 4. *P. machaon* sitting on *Ledum groenlandicum* near the basecamp (Site 8).

LYCAENIDAE

Agriades glandon lacustris- A common subspecies that is restricted to rock outcrops of the Canadian Shield. This species is only found in the Kazan Uplands and in the Fort Vermillion regions of Alberta.



Figure 5. *A. glandon lacustris* sitting on *Vaccinium vitis-idaea* near the basecamp (Site 8).

NYMPHALIDAE

Limenitis archippus - An uncommon species occurring in northern Canada. The specimen taken at Colin-Cornwall is near the northern limits of its range; only three more northerly records exist, at La Butte Creek Wildland Park, Ft. Smith and Hay River, NWT.

Boloria eunomia dawsoni – A common species found in across Canada. Subspecies *dawsoni* may not be the correct name for the Canadian Shield specimens. They tend to be darker from other Alberta subspecies (Bird et al. 1995) and with further study these populations may be renamed.

SATYRIDAE

Oeneis chryxus caryi - An uncommon subspecies occurring in the boreal forests of Canada. This is the most northern record for Alberta though it exists in the NWT and Yukon. One specimen was observed on the sand esker located on the north shore of esker lake (Site 13).

B. Macro-moths:

Range and biological information is from Bowman (1951), McGugan (1958), Prentice (1962, 1963), and Tuskes et al. (1996) except as noted.

GEOMETRIDAE

Nemoria rubrifrontaria - This species represents a new record for Alberta, and is a significant range extension. The species has not been recorded between Alberta and northern Ontario/Michigan. In eastern North America, this is a relatively widespread species of boreal bogs and heath barrens where *Myrica* grows.

SATURNIIDAE

Hyalophora gloveri - This is an uncommon species that occurs across the boreal forest. This is the most northern record for the province though it has been found near Zama City and into southern NWT. A cocoon was found on *Sheperdia canadensis* on a sand esker 4 km west of basecamp (site 13).

NOTODONTIDAE

Closteria brucei - This is an uncommon species that occurs across the boreal forest. This record is a substantial range extension; published records report it only as far North as the southern boreal forest, although it has been taken recently in Zama City.

NOCTUIDAE (sensu Poole 1996)

Range and biological information is from Bowman (1951) and McGugan (1958), except as noted.

Lomanaltes eductalis - This is an uncommon species that exists across the boreal forest. Although no published records report it north of the southern boreal, it has been taken recently at Zama City.

Drasteria hudsonica - This uncommon northern species occurs in the boreal forest and grasslands of Alberta. The only other boreal forest locality is south of Athabasca Dunes Wildland Park, where it was collected on the Shield Survey in 2000. In Colin-Cornwall, large numbers of this species were observed on the sand eskers located on the north shore of Esker Lake.

Sideridis maryx - This is an uncommon species that occurs across the boreal forest. This record is a substantial range extension from the southern boreal.

Anarta luteola - A common species that occurs across the boreal forest. This record is a substantial range extension, having only been found in the southern boreal until now. Specimens were collected nectaring at *Chamaedaphne calyculata* and *Arctostaphylos uva-ursi* in large numbers.



Figure 6. *A. luteola* nectaring on *Chamaedaphne calyculata* (Site 9).

Heliothis borealis - This is an uncommon species that occurs across the boreal forest. This record is a substantial range extension from the southern boreal. Specimens were collected nectaring at *Arctostaphylos uva-ursi*.

C. Micro-moths:

Range and biological information is from Bowman (1951) and Prentice (1965), unless otherwise noted.

TINEIDAE

Monopis laevigella - This is the most northerly record known for this holarctic species, but it is probably widely distributed in the northern boreal forest, including into the NWT.

GRACILLARIIDAE

Caloptilia sp. prob. *betulivora* - This boreal forest species appears to be common and widespread, but it cannot be reliably separated from other closely related species.

TORTRICIDAE

Range and host information is primarily from Heinrich (1923, 1926).

Phaneta tarandana - This record lies at the northern edge of the known distribution for this uncommon species. Nothing is known of its biology.

Ancylis goodeliana - This record lies at the northern edge of the known distribution for this uncommon species. Nothing is known of its biology.

CRAMBIDAE

Parapoynx maculalis - This species was listed as rare when it was collected in La Butte Creek Wildland Provincial Park in 2001. It has since been collected here and elsewhere in the province, so its abundance is hereby downgraded to Uncommon. It is widespread but very localized, occurring only in habitats where its aquatic host plants (*Nuphar*, *Nymphaea*, *Brasenia* spp.) are found.

Ostrinia marginalis - This species is uncommon, but distributed widely across northwestern North America. Nothing is known of its biology.

PTEROPHORIDAE

Capperia ningoris - This species is an uncommon resident across Alberta. This record is a substantial range extension, having only been found in the southern boreal until now.

Summary and Conclusions

A total of 138 Lepidoptera species were collected on this survey of which 52 are microlepidoptera, and 86 are macrolepidoptera, including 20 butterflies. Although the majority of these species are typical inhabitants of the boreal forest of western North America, some species were previously considered to be inhabitants of the mountain or grassland ecosystems. Some species records are at the edge of their known range, and many records represent considerable northern range extensions. Three butterfly species *Papilio machaon hudsonianus*, *Limenitis archippus*, and *Oeneis chryxus caryi* are classified as uncommon. All occur in the boreal forest but exist in localized populations. Six macro-moth species (*Nemoria mimosaria*, *Hyalophora gloveri*, *Clostera brucei*, *Lomanaltes eductalis*, *Drasteria hudsonica*, and *Heliothis borealis*) are classified as uncommon. Five micro-moth species (*Phaneta tarandana*, *Ancylis goodeliana*, *Parapoynx maculalis*, *Ostrinia marginalis*, *Capperia ningoris*) are considered to be uncommon, although their status may change with more intensive collecting. With further sampling many more riparian and Canadian Shield specialists await discovery in the region.

Acknowledgements

This report would not have been possible without the assistance of members of the Alberta Lepidopterists' Guild, particularly Gerald Hilchie and Wayne Nordstrom (who collected specimens along with the author). Thanks are also due to Lorna Ash, Duncan Hilchie, Ted Johnson, and Terri MacKinnon who collected specimens during their July visit to Colin-Cornwall Park. Gary Anweiler and Chris Schmidt provided and confirmed many identifications.

The opportunity to inventory the lepidoptera was made possible through an invitation to the members of the Alberta Lepidopterists' Guild from the Alberta Natural Heritage Information Centre of the Parks and Protected Areas Division. In addition, parks staff of the Lac La Biche District made this project feasible by providing logistic support, including transportation, field camps and food. Without the efforts of Ted Johnson, Jennifer Okrainec and the rest of the parks staff along with the field camp crew, this project would not have been possible.

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Appendix 1: Complete data for specimens collected at Colin-Cornwall Lakes Wildland Park.

Abundance categories are as follows: abundant (A); common (C); uncommon (U). Higher classification follows Kristensen (1999) except NOCTUIDAE sensu Poole (1996); nomenclature follows Poole (1996) except as noted by an asterisk. MONA Numbers follow Hedges et al. (1983); new species and incomplete determinations inserted with decimals. Note: for those species highlighted in yellow, see the Errata sheet at the beginning of the report.

Abn.	MONA No.	Family	Species	Colin-Cornwall sites																				
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
C	415.00	TINEIDAE	Monopis laevigella (D. & S.)								2													2
C	560.00	BUCCULATRICIDAE	Bucculatrix canadensisella Cham.								9													9
C	587.00	GRACILLARIIDAE	Caloptilia alnivorella (Cham.)								1	2												3
C	594.10	GRACILLARIIDAE	Caloptilia sp. prob. betulivora McD.								1								1					2
C	639.00	GRACILLARIIDAE	Caloptilia stigmatella (F.)															1						1
C	1875.00	GELECHIIDAE	Xenolechia aethiops (H. & W.)									1					1							2
C	1946.00	GELECHIIDAE	Gelechia lynceella? Zell.									1												1
C	2069.00	GELECHIIDAE	Chionodes continua (Zell.)								4													4
C	2090.00	GELECHIIDAE	Chionodes lugubrella (F.)								1													1
C	2127.00	GELECHIIDAE	Filatima abactella (Clarke)								1					4								5
?	2310.91	GELECHIIDAE	GELECHIIDAE sp. 1								3													3
?	2310.92	GELECHIIDAE	GELECHIIDAE sp. 2								1													1
?	2310.93	GELECHIIDAE	GELECHIIDAE sp. 3								3													3
?	2310.94	GELECHIIDAE	GELECHIIDAE unidentifiable								1													1
C	2743.00	TORTRICIDAE	Endothenia nubilana (Clem.)		1						1													2
C	2745.00	TORTRICIDAE	Taniva albolineana (Kft.)								1													1
A	2847.00	TORTRICIDAE	Olethreutes glaciana (Mosch.)								4													4
C	2848.00	TORTRICIDAE	Olethreutes sp.nr. (not =) bipartitana (Clem.)								1													1
?	2859.91	TORTRICIDAE	Olethreutes sp. A								2													2
?	2859.92	TORTRICIDAE	Olethreutinae sp. 1								3													3
U	2956.00	TORTRICIDAE	Phaneta tarandana (Mosch.)								7			1										8
?	2969.00	TORTRICIDAE	Phaneta sp.nr. indagatricana (Heinr.)								1													1
C	3227.00	TORTRICIDAE	Gypsonoma substitutionis Heinr.								1													1
C	3309.00	TORTRICIDAE	Acleris sp. prob. walkera (McD.)														1							1
U	3380.00	TORTRICIDAE	Ancylis goodeliana (Fern.)																	1				1
C	3382.00	TORTRICIDAE	Ancylis unguicella (L.)								2	1							1					4
?	3455.00	TORTRICIDAE	Cydia sp. prob. strobilella (L.)								1	1								1				3
C	3508.00	TORTRICIDAE	Acleris sp. prob. caliginosana (Wlk.)								1													1
C	3518.00	TORTRICIDAE	Acleris braunana (McD.)								1													1
C	3521.00	TORTRICIDAE	Acleris semiannula (Rob.)								4	4						1						9
C	3540.00	TORTRICIDAE	Acleris logiana (Cl.)								1													1
C	3549.00	TORTRICIDAE	Acleris maccana (Tr.)								2						1		2					3
C	3565.00	TORTRICIDAE	Eulia ministrana (L.)								2													2
C	3580.11	TORTRICIDAE	Acleris macdunnoughi Obr.								2													2

Abn.	MONA No.	Family	Species	Colin-Cornwall sites																						
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	combined	
C	3635.00	TORTRICIDAE	Choristoneura rosaceana (Harr.)							1														1		
A	3637.00	TORTRICIDAE	Choristoneura conflictana (Wlk.)		3						2													5		
A	3638.00	TORTRICIDAE	Choristoneura fumiferana (Clem.)								4													4		
C	3643.00	TORTRICIDAE	Choristoneura pinus Freeman								1													1		
C	3682.00	TORTRICIDAE	Clepsis persicana (Fitch)								3													3		
C	3694.00	TORTRICIDAE	Olethreutes metallicana (Hbn.)								1													1		
C	3961.00	HESPEROIDIDAE	Erynnis persius borealis (Cary)								1								1	1	4		7			
U	4166.00	PAPILIONIDAE	Papilio machaon hudsonianus A.H. Clark															1							1	
A	4176.10	PAPILIONIDAE	Papilio canadensis Roth.		1	3					5				2			1			4			16		
C	4195.30	PIERIDAE	Pieris oleracea oleracea Harr.												1					1				2		
C	4222.00	PIERIDAE	Colias gigantea gigantea Stkr.																					1	1	
C	4322.00	LYCAENIDAE	Callophrys a. augustinus (Westwood)								1														1	
C	4324.00	LYCAENIDAE	Callophrys polia obscura (Ferris)									1			1	1									2	
C	4329.00	LYCAENIDAE	Callophrys eryphon eryphon (Boisduval)									1													1	
C	4362.00	LYCAENIDAE	Everes amyntula albrichti Clench			2																			2	
C	4363.00	LYCAENIDAE	Celastrina ladon lucia (Kby.)															1							1	
C	4372.00	LYCAENIDAE	Glauopsyche lygdamus couperi Grote								1														1	
C	4384.00	LYCAENIDAE	Agriades glandon megalos (McD.)			3			1		1						1			1	3		1		11	
C	4429.00	NYMPHALIDAE	Polygonia faunus hylas (W.H. Edw.)								2														2	
C	4432.00	NYMPHALIDAE	Nymphalis antiopa (L.)						1																1	
C	4463.00	NYMPHALIDAE	Boloria eunomia dawsoni (B. & McD.)			3	2	2			3												5		15	
C	4471.00	NYMPHALIDAE	Boloria freija freija (Thunb.)									2											1		3	
C	4522.00	NYMPHALIDAE	Limenitis arthemis rubrofasciata (B. & McD.)			1			1		2											1	2	2	9	
C	4523.00	NYMPHALIDAE	Limenitis archippus (Cram.)								1														1	2
C	4596.00	NYMPHALIDAE	Erebia discoidalis discoidalis (W. Kirby)														1								1	
C	4606.00	NYMPHALIDAE	Oeneis chryxus caryi Dyar														1								1	
C	4703.00	CRAMBIDAE	Gesneria centuriella (D. & S.)								2														2	
U	4759.00	CRAMBIDAE	Parapoynx maculalis (Clem.)						1		1														2	
U	4948.00	CRAMBIDAE	Ostrinia marginalis (Wlk.)																				1		1	
C	4953.00	CRAMBIDAE	Phlyctaenia coronata (Hufn.)								2														2	
C	5060.00	CRAMBIDAE	Pyrausta borealis Packard																				1		1	
A	5391.00	CRAMBIDAE	Chrysoteuchia topiaria (Zeller)								6														6	
C	5529.00	PYRALIDAE	Herculia thymetusalis (Wlk.)								1														1	
C	5718.00	PYRALIDAE	Myelopsis subtetricella (Rag.)								8														8	
C	5969.99	PYRALIDAE	Zophodia grossulariella Hbn.								1														1	
?	6076.00	PYRALIDAE	PYRALIDAE sp. 1														1								1	
?	6088.91	PYRALIDAE	Phycitinae sp. 1								1									1				2		
?	6088.92	PYRALIDAE	Phycitinae sp. 2														1								1	

			Colin-Cornwall sites																						
Abn.	MONA No.	Family	Species	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	combined
U	6094.00	PTEROPHORIDAE	Capperia ningoris (Wlsm.)							1														1	
C	6118.00	PTEROPHORIDAE	Amblyptilia pica Wlsm.												1									1	
C	6251.00	DREPANIDAE	Drepana arcuata Wlk.			1																		1	
C	6252.00	DREPANIDAE	Drepana bilineata (Pack.)												1									1	
C	6321.00	GEOMETRIDAE	Epelis tuncataria (Wlk.)										2											2	
C	6396.00	GEOMETRIDAE	Semiothisa neptaria (Gn.)								3									2	7			12	
C	6570.00	GEOMETRIDAE	Aethalura intertexta (Wlk.)									1	1		2	12	3							19	
C	6597.00	GEOMETRIDAE	Ectropis crepuscularia (D. & S.)										1											1	
C	6598.00	GEOMETRIDAE	Protoboarmia porcelaria (Gn.)								2													2	
A	6796.00	GEOMETRIDAE	Campaea perlata (Gn.)								1													1	
C	6799.00	GEOMETRIDAE	Epirrhantis substriataria (Hulst.)											1										1	
C	6818.00	GEOMETRIDAE	Selenia kentaria (Grt. & Rob.)								2	2				1	4							9	
C	6836.00	GEOMETRIDAE	Anagoga occiduaria (Wlk.)			1																		1	
C	6842.00	GEOMETRIDAE	Plagodis phlogosaria (Gn.)																1	1				2	
C	6844.00	GEOMETRIDAE	Plagotis alcoolaria (Gn.)								2													2	
C	6885.00	GEOMETRIDAE	Besma quercivoraria (Gn.)								1													1	
U	7047.00	GEOMETRIDAE	Nemoria rubrifrontaria (Packard)																			1		1	
C	7085.00	GEOMETRIDAE	Mesothea incerata (Wk.)									1								1				2	
C	7139.00	GEOMETRIDAE	Cyclophora pendulinaria (Gn.)								2								2	1				5	
C	7166.00	GEOMETRIDAE	Scopula frigidaria (Mosch.)								1													1	
C	7169.00	GEOMETRIDAE	Scopula inductata (n.)		1						1													2	
C	7293.00	GEOMETRIDAE	Rheumaptera hastata (L.)																			1		1	
C	7399.00	GEOMETRIDAE	Euphyia unangulata (Haw.)							1														1	
C	7606.00	GEOMETRIDAE	Eupithecia sp.								1	7		1	2				1					12	
C	7637.00	GEOMETRIDAE	Cladara limitaria (Wlk.)								3	2	1	1	2									9	
C	7639.00	GEOMETRIDAE	Cladara atroliturata (Wlk.)										1	1		1								3	
A	7687.00	LASIOCAMPIDAE	Phyllodesma americanum (Harr.)								1	1					4		5					11	
U	7769.00	SATURNIDAE	Hyalophora gloveri (Stkr.)												1									1	
C	7821.00	SPHINGIDAE	Smerinthus jamaicensis (Drury)													1								1	
C	7822.00	SPHINGIDAE	Smerinthus cerisyi Kby.												1									1	
C	7853.00	SPHINGIDAE	Hemaris thysbe (F.)								1			1							1		3		
U	7900.00	NOTODONTIDAE	Closteria brucei (Hy. Edw.)																2					2	
C	7915.00	NOTODONTIDAE	Nadata gibbosa (J. E. Smith)								2													2	
C	8137.00	ARCTIIDAE	Spilosoma virginica (F.)			1					2													3	
C	8162.00	ARCTIIDAE	Platarctia parthenos (Harr.)								1													1	
C	8356.00	NOCTUIDAE	Chytolita petrealis (Grt.)								4													4	
C	8397.00	NOCTUIDAE	Paithis angulalis (Hbn.)								2									1				3	
U	8455.00	NOCTUIDAE	Lomanaltes eductalis (Wlk.)																					1	

Abn.	MONA No.	Family	Species	Colin-Cornwall sites																				
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
C	8555.00	NOCTUIDAE	<i>Scoliopteryx libatrix</i> (L.)									1			1									2
U	8632.00	NOCTUIDAE	<i>Drasteria hudsonica</i> (G. & R.)							2					2									4
C	8703.00	NOCTUIDAE	<i>Zale duplicata</i> (Bethune)																	1				1
C	8950.00	NOCTUIDAE	<i>Plusia putnami</i> Grt.								1													1
C	9048.00	NOCTUIDAE	<i>Lithacodia albidula</i> (Gn.)								1													1
C	9203.00	NOCTUIDAE	<i>Acronicta dactylina</i> Grt.								1													1
C	9212.00	NOCTUIDAE	<i>Acronicta grisea</i> Wlk.								1		1											2
C	9261.00	NOCTUIDAE	<i>Acronicta impressa</i> Wlk.																		1			1
C	9556.00	NOCTUIDAE	<i>Chytonix palliatricula</i> (Gn.)							1														1
C	9875.00	NOCTUIDAE	<i>Xylena thoracica</i> (Putnam-Cramer)								4		6	1										11
C	9888.00	NOCTUIDAE	<i>Lithophane innomoinata</i> (Sm.)								1		1											2
C	9909.00	NOCTUIDAE	<i>Lithophane tepida</i> Grt.																	1	1	1		3
C	9917.00	NOCTUIDAE	<i>Lithophane fagina</i> Morr.									1			1		1							3
C	9922.00	NOCTUIDAE	<i>Lithophane pexata</i> Grt.								1		1											2
C	9928.00	NOCTUIDAE	<i>Lithophane thaxteri</i> Grt.								1						1							2
C	10005.00	NOCTUIDAE	<i>Feralia jocosa</i> (Gn.)											1										1
C	10008.00	NOCTUIDAE	<i>Feralia comstocki</i> (Grt.)											1										1
C	10268.00	NOCTUIDAE	<i>Sideridis maryx</i> (Gn.)																		1			1
C	10289.00	NOCTUIDAE	<i>Orthodes goodelli</i> (Grt.)								1													1
C	10290.00	NOCTUIDAE	<i>Orthodes obscura</i> (Sm.)											1										1
C	10312.00	NOCTUIDAE	<i>Papestra cristifera</i> (Wlk.)											1										1
C	10332.00	NOCTUIDAE	<i>Anarta luteola</i> Grt. & Rob.	1							2	1		1	2									7
C	10338.00	NOCTUIDAE	<i>Trichordestra liquida</i> (Grt.)									1		2										3
C	10372.00	NOCTUIDAE	<i>Lacinipolia anguina</i> (Grt.)								3	1								1	4			9
C	10406.00	NOCTUIDAE	<i>Lacinipolia olivacea</i> (Morr.)								1													1
C	10490.00	NOCTUIDAE	<i>Orthosia revicta</i> (Morr.)								3	7	4	3	3	1	1	4						26
C	10493.00	NOCTUIDAE	<i>Orthosia segregata</i> (Sm.)											1										1
C	10660.00	NOCTUIDAE	<i>Agrotis obliqua</i> (Sm.)								1								4					5
U	11081.00	NOCTUIDAE	<i>Heliothis borealis</i> (Hamp.)											2										2
?	?	NOCTUIDAE	?									1												1
																								437

Appendix 2: List of Species found in Colin-Cornwall Wildland Park

Higher classification follows Kristensen (1999) except Noctuidae sensu Poole (1996); nomenclature follows Poole (1996) except as noted by an asterisk. MONA Numbers follow Hodges et al. (1983); new species and incomplete determinations inserted with decimals. Note: for those species highlighted in yellow, see the Errata sheet at the beginning of the report.

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
415.00	Tineidae	Monopis laevigella	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
415.00	Tineidae	Monopis laevigella	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
560.00	Bucculatricidae	Bucculatrix canadensisella	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
560.00	Bucculatricidae	Bucculatrix canadensisella	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
560.00	Bucculatricidae	Bucculatrix canadensisella	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
560.00	Bucculatricidae	Bucculatrix canadensisella	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
560.00	Bucculatricidae	Bucculatrix canadensisella	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
560.00	Bucculatricidae	Bucculatrix canadensisella	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
560.00	Bucculatricidae	Bucculatrix canadensisella	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
560.00	Bucculatricidae	Bucculatrix canadensisella	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
560.00	Bucculatricidae	Bucculatrix canadensisella	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
587.00	Gracillariidae	Caloptilia alnivorella	Esker Lake, basecamp	59.55533	110.26314	06-Jun-02	DM	MV light	Salix with Spruce	Adult
587.00	Gracillariidae	Caloptilia alnivorella	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	08-Jun-02	DM	MV light	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
587.00	Gracillariidae	Caloptilia alnivorella	Esker Lake, bog 100m SE of basecamp	59.55363	110.26167	12-Jun-02	DM	MV light	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
594.10	Gracillariidae	Caloptilia sp. prob. betulivora	Esker Lake, basecamp	59.55533	110.26314	06-Jun-02	DM	MV light	Salix with Spruce	Adult
594.10	Gracillariidae	Caloptilia sp. prob. betulivora	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
639.00	Gracillariidae	Caloptilia stigmatella	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
1875.00	Gelechiidae	Xenolechia aethiops	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	08-Jun-02	DM	MV light	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
1875.00	Gelechiidae	Xenolechia aethiops	Esker Lake, grassy ridge SE of basecamp	59.54953	110.25416	11-Jun-02	DM	UV trap	Aspen & Spruce	Adult
1946.00	Gelechiidae	Gelechia lynceella?	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2069.00	Gelechiidae	Chionodes continuaella	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
2069.00	Gelechiidae	Chionodes continua	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2069.00	Gelechiidae	Chionodes continua	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2069.00	Gelechiidae	Chionodes continua	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2090.00	Gelechiidae	Chionodes lugubrella	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2127.00	Gelechiidae	Filatima abactella	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2127.00	Gelechiidae	Filatima abactella	Esker Lake, grassy ridge SE of basecamp	59.54953	110.25416	11-Jun-02	DM	UV trap	Aspen & Spruce	Adult
2127.00	Gelechiidae	Filatima abactella	Esker Lake, grassy ridge SE of basecamp	59.54953	110.25416	11-Jun-02	DM	UV trap	Aspen & Spruce	Adult
2127.00	Gelechiidae	Filatima abactella	Esker Lake, grassy ridge SE of basecamp	59.54953	110.25416	11-Jun-02	DM	UV trap	Aspen & Spruce	Adult
2127.00	Gelechiidae	Filatima abactella	Esker Lake, grassy ridge SE of basecamp	59.54953	110.25416	11-Jun-02	DM	UV trap	Aspen & Spruce	Adult
2310.91	Gelechiidae	Gelechiidae sp. 1	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2310.91	Gelechiidae	Gelechiidae sp. 1	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2310.91	Gelechiidae	Gelechiidae sp. 1	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2310.92	Gelechiidae	Gelechiidae sp. 2	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2310.93	Gelechiidae	Gelechiidae sp. 3	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2310.93	Gelechiidae	Gelechiidae sp. 3	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2310.93	Gelechiidae	Gelechiidae sp. 3	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2310.94	Gelechiidae	Gelechiidae unidentifiable	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2743.00	Tortricidae	Endothenia nubilana	Colin Lake W, beach	59.56243	110.22321	09-Jul-02	Johnston, T.	hand net	sandy beach	Adult
2743.00	Tortricidae	Endothenia nubilana	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2745.00	Tortricidae	Taniva albolineana	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2847.00	Tortricidae	Olethreutes glaciana	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2847.00	Tortricidae	Olethreutes glaciana	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2847.00	Tortricidae	Olethreutes glaciana	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2847.00	Tortricidae	Olethreutes glaciana	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
2848.00	Tortricidae	Olethreutes sp. nr. (not =) bipartitana	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2859.91	Tortricidae	Olethreutes sp. A	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2859.91	Tortricidae	Olethreutes sp. A	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2859.92	Tortricidae	Olethreutinae sp. 1	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2860.92	Tortricidae	Olethreutinae sp. 1	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2861.92	Tortricidae	Olethreutinae sp. 1	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2956.00	Tortricidae	Phaneta tarandana	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2956.00	Tortricidae	Phaneta tarandana	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2956.00	Tortricidae	Phaneta tarandana	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2956.00	Tortricidae	Phaneta tarandana	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2956.00	Tortricidae	Phaneta tarandana	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2956.00	Tortricidae	Phaneta tarandana	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2956.00	Tortricidae	Phaneta tarandana	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2956.00	Tortricidae	Phaneta tarandana	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2956.00	Tortricidae	Phaneta tarandana	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
2956.00	Tortricidae	Phaneta tarandana	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	09-Jun-02	DM	hand net	open sand with sage, juniper, bearberry, and some pine	Adult
2969.00	Tortricidae	Phaneta sp. nr. indagatricana	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
3227.00	Tortricidae	Gypsonoma substitutionis	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
3309.00	Tortricidae	Acleris sp. prob. walkerana	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
3380.00	Tortricidae	Ancylis goodeliana	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54352	111.31531	12-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
3382.00	Tortricidae	Ancylis unguicella	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
3382.00	Tortricidae	Ancylis unguicella	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
3382.00	Tortricidae	Ancylis unguicella	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	06-Jun-02	DM	hand net	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
3382.00	Tortricidae	Ancylis unguicella	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54353	112.31531	12-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
3455.00	Tortricidae	Cydia sp. prob. strobilella	Esker Lake, basecamp	59.55533	110.26314	08-Jun-02	DM	hand net	white spruce & birch	Adult

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
3455.00	Tortricidae	Cydia sp. prob. strobilella	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	08-Jun-02	DM	MV light	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
3455.00	Tortricidae	Cydia sp. prob. strobilella	Woodman Lake E, rock outcrop nr. outlet	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
3508.00	Tortricidae	Acleris sp. prob. caliginosana	Esker Lake, basecamp	59.55533	110.26314	06-Jun-02	DM	MV light	Salix with Spruce	Adult
3518.00	Tortricidae	Acleris braunana	Esker Lake, basecamp	59.55533	110.26314	08-Jun-02	DM	hand net	white spruce & birch	Adult
3521.00	Tortricidae	Acleris semiannula	Esker Lake, basecamp	59.55533	110.26314	06-Jun-02	DM	MV light	Salix with Spruce	Adult
3521.00	Tortricidae	Acleris semiannula	Esker Lake, basecamp	59.55533	110.26314	06-Jun-02	DM	MV light	Salix with Spruce	Adult
3521.00	Tortricidae	Acleris semiannula	Esker Lake, basecamp	59.55533	110.26314	07-Jun-02	DM	MV light	Salix with Spruce	Adult
3521.00	Tortricidae	Acleris semiannula	Esker Lake, basecamp	59.55533	110.26314	07-Jun-02	DM	MV light	Salix with Spruce	Adult
3521.00	Tortricidae	Acleris semiannula	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	06-Jun-02	DM	hand net	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
3521.00	Tortricidae	Acleris semiannula	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	08-Jun-02	DM	MV light	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
3521.00	Tortricidae	Acleris semiannula	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	08-Jun-02	DM	MV light	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
3521.00	Tortricidae	Acleris semiannula	Esker Lake, bog 100m SE of basecamp	59.55363	110.26167	12-Jun-02	DM	MV light	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
3521.00	Tortricidae	Acleris semiannula	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
3540.00	Tortricidae	Acleris logiana	Esker Lake, bog 100m SE of basecamp	59.55363	110.26167	12-Jun-02	DM	MV light	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
3549.00	Tortricidae	Acleris maccana	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
3549.00	Tortricidae	Acleris maccana	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
3549.00	Tortricidae	Acleris maccana	Esker Lake, sand esker 500m NW of basecamp	59.55715	110.27490	06-Jun-02	DM	UV trap	open sand with sage, juniper, bearberry, and some pine	Adult
3565.00	Tortricidae	Eulia ministrana	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
3565.00	Tortricidae	Eulia ministrana	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
3580.11	Tortricidae	Acleris macdunnoughi	Esker Lake, basecamp	59.55533	110.26314	06-Jun-02	DM	MV light	Salix with Spruce	Adult
3580.11	Tortricidae	Acleris macdunnoughi	Esker Lake, basecamp	59.55533	110.26314	07-Jun-02	DM	MV light	Salix with Spruce	Adult

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
3635.00	Tortricidae	Choristoneura rosaceana	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
3637.00	Tortricidae	Choristoneura conflictana	Colin Lake SE, open forest	59.53245	110.02230	09-Jul-02	GH, LA, DH	hand net	open forest	Adult
3637.00	Tortricidae	Choristoneura conflictana	Colin Lake SE, open forest	59.53245	110.02230	09-Jul-02	Johnston, T.	hand net	open forest	Adult
3637.00	Tortricidae	Choristoneura conflictana	Colin Lake SE, open forest	59.53245	110.02230	09-Jul-02	Nordstrom, W.	hand net	open forest	Adult
3637.00	Tortricidae	Choristoneura conflictana	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
3637.00	Tortricidae	Choristoneura conflictana	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
3638.00	Tortricidae	Choristoneura fumiferana	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
3638.00	Tortricidae	Choristoneura fumiferana	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
3638.00	Tortricidae	Choristoneura fumiferana	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
3638.00	Tortricidae	Choristoneura fumiferana	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
3643.00	Tortricidae	Choristoneura pinus	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
3682.00	Tortricidae	Clepsis persicana	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
3682.00	Tortricidae	Clepsis persicana	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
3682.00	Tortricidae	Clepsis persicana	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
3694.00	Tortricidae	Olethreutes metallicana	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
3961.00	Hesperioididae	Erynnis persius borealis	Esker Lake, basecamp	59.55533	110.26314	06-Jul-02	GH, LA, DH	hand net	Salix with Spruce	Adult
3961.00	Hesperioididae	Erynnis persius borealis	Esker Lake, outlet	59.54787	110.25004	09-Jul-02	GH, LA, DH	hand net	riparian with alder & willow	Adult
3961.00	Hesperioididae	Erynnis persius borealis	Woodman Lake E, rock outcrop nr. outlet	59.54934	110.43033	10-Jun-02	DM	hand net	rock, pine, saskatoon, cherry	Adult
3961.00	Hesperioididae	Erynnis persius borealis	Woodman lake nr outlet, Stream Hill	59.55434	110.47104	07-Jul-02	GH, LA, DH	hand net	riparian area	Adult
3961.00	Hesperioididae	Erynnis persius borealis	Woodman lake nr outlet, Stream Hill	59.55434	110.47104	07-Jul-02	GH, LA, DH	hand net	riparian area	Adult
3961.00	Hesperioididae	Erynnis persius borealis	Woodman lake nr outlet, Stream Hill	59.55434	110.47104	07-Jul-02	GH, LA, DH	hand net	riparian area	Adult
3961.00	Hesperioididae	Erynnis persius borealis	Woodman lake nr outlet, Stream Hill	59.55434	110.47104	07-Jul-02	GH, LA, DH	hand net	riparian area	Adult
4166.00	Papilionidae	Papilio machaon hudsonianus	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	13-Jun-02	DM	hand net	open sand with sage, juniper, bearberry, and some pine	Adult
4176.10	Papilionidae	Papilio canadensis	Colin Lake SE, open forest	59.53245	110.02230	09-Jul-02	Nordstrom, W.	hand net	open forest	Adult

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
4176.10	Papilionidae	Papilio canadensis	Colin Lake W, beach	59.56243	110.22321	09-Jul-02	GH, LA, DH	hand net	sandy beach	Adult
4176.10	Papilionidae	Papilio canadensis	Colin Lake W, beach	59.56243	110.22321	09-Jul-02	GH, LA, DH	hand net	sandy beach	Adult
4176.10	Papilionidae	Papilio canadensis	Colin Lake W, beach	59.56302	110.22846	July 9-10, 2002	GH, LA, DH	pit trap	sandy beach	Adult
4176.10	Papilionidae	Papilio canadensis	Esker Lake, basecamp	59.55533	110.26314	06-Jul-02	GH, LA, DH	hand net	Salix with Spruce	Adult
4176.10	Papilionidae	Papilio canadensis	Esker Lake, basecamp	59.55533	110.26314	10-Jul-02	GH, LA, DH	pit trap	Salix with Spruce	Adult
4176.10	Papilionidae	Papilio canadensis	Esker Lake, basecamp	59.55533	110.26314	10-Jul-02	GH, LA, DH	pit trap	Salix with Spruce	Adult
4176.10	Papilionidae	Papilio canadensis	Esker Lake, basecamp	59.55424	110.26317	July 6-10, 2002	GH, LA, DH	pit trap	Salix with Spruce	Adult
4176.10	Papilionidae	Papilio canadensis	Esker Lake, basecamp	59.55424	110.26317	July 9 -10, 2002	GH, LA, DH	pit trap		Adult
4176.10	Papilionidae	Papilio canadensis	Esker Lake, outlet	59.54787	110.25004	09-Jul-02	GH, LA, DH	hand net	riparian with alder & willow	Adult
4176.10	Papilionidae	Papilio canadensis	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	07-Jul-02	GH, LA, DH	hand net	open sand with pincherry, buffaloberry, sage, juniper, bearberry, and some pine	Adult
4176.10	Papilionidae	Papilio canadensis	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	07-Jul-02	GH, LA, DH	hand net	open sand with pincherry, buffaloberry, sage, juniper, bearberry, and some pine	Adult
4176.10	Papilionidae	Papilio canadensis	Woodman lake nr outlet, Stream Hill	59.55434	110.47104	07-Jul-02	GH, LA, DH	hand net	riparian area	Adult
4176.10	Papilionidae	Papilio canadensis	Woodman lake nr outlet, Stream Hill	59.55434	110.47104	07-Jul-02	GH, LA, DH	hand net	riparian area	Adult
4176.10	Papilionidae	Papilio canadensis	Woodman lake nr outlet, Stream Hill	59.55434	110.47104	07-Jul-02	GH, LA, DH	hand net	riparian area	Adult
4176.10	Papilionidae	Papilio canadensis	Woodman lake nr outlet, Stream Hill	59.55434	110.47104	07-Jul-02	GH, LA, DH	hand net	riparian area	Adult
4195.30	Pieridae	Pieris oleracea oleracea	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	13-Jun-02	DM	hand net	open sand with sage, juniper, bearberry, and some pine	Adult
4195.30	Pieridae	Pieris oleracea oleracea	Woodman Lake E, rock outcrop nr. outlet 59.54934	59.54934	110.43033	08-Jul-02	GH, LA, DH	hand net	rock, pine, saskatoon, cherry	Adult
4222.00	Pieridae	Colias gigantea gigantea	Woodman Creek, riparian area	59.54502	110.38846	08-Jul-02	Nordstrom, W.	hand net	riparian area	Adult
4322.00	Lycaenidae	Callophrys augustinus augustinus	Esker Lake, basecamp	59.55533	110.26314	06-Jun-02	DM	hand net	Salix with Spruce	Adult
4324.00	Lycaenidae	Callophrys polia obscura	Esker Lake, bog 800m NW of basecamp	59.55748	110.27329	09-Jun-02	DM	hand net	sphagnum, leatherleaf and black spruce bog	Adult
4324.00	Lycaenidae	Callophrys polia obscura	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	06-Jun-02	DM	hand net	open sand with sage, juniper, bearberry, and some pine	Adult
4329.00	Lycaenidae	Callophrys eryphon eryphon	Esker Lake, bog 800m NW of basecamp	59.55748	110.27329	12-Jun-02	DM	hand net	sphagnum, leatherleaf and black spruce bog	Adult
4362.00	Lycaenidae	Everes amyntula albrighti	Colin Lake W, beach	59.56243	110.22321	09-Jul-02	GH, LA, DH	hand net	sandy beach	Adult

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
4362.00	Lycaenidae	Everes amyntula albrighti	Colin Lake W, beach	59.56243	110.22321	09-Jul-02	GH, LA, DH	hand net	sandy beach	Adult
4363.00	Lycaenidae	Celastrina ladon lucia	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	08-Jun-02	DM	hand net	open sand with sage, juniper, bearberry, and some pine	Adult
4372.00	Lycaenidae	Glauopsyche lygdamus couperi	Esker Lake, basecamp	59.55533	110.26314	11-Jul-02	GH, LA, DH	hand net	Salix with Spruce	Adult
4384.00	Lycaenidae	Agriades glandon lacustris	Colin Lake W, beach	59.56243	110.22321	09-Jul-02	GH, LA, DH	hand net	sandy beach	Adult
4384.00	Lycaenidae	Agriades glandon lacustris	Colin Lake W, beach	59.56243	110.22321	09-Jul-02	GH, LA, DH	hand net	sandy beach	Adult
4384.00	Lycaenidae	Agriades glandon lacustris	Colin Lake W, beach	59.56243	110.22321	09-Jul-02	GH, LA, DH	hand net	sandy beach	Adult
4384.00	Lycaenidae	Agriades glandon lacustris	Esker Lake S, rock outcrop	59.53561	110.26942	07-Jul-02	Nordstrom, W.	hand net	rock outcrop	Adult
4384.00	Lycaenidae	Agriades glandon lacustris	Esker Lake, basecamp	59.55533	110.26314	11-Jul-02	GH, LA, DH	hand net	Salix with Spruce	Adult
4384.00	Lycaenidae	Agriades glandon lacustris	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54351	110.31531	11-Jun-02	DM	hand net	rock, pine, saskatoon, cherry	Adult
4384.00	Lycaenidae	Agriades glandon lacustris	Esker Lake, sand esker 4 km W of basecamp	59.55170	110.31406	12-Jun-02	DM	hand net	open sand with pincherry, buffaloberry, sage, juniper, bearberry, and some pine	Adult
4384.00	Lycaenidae	Agriades glandon lacustris	Woodman Lake E, rock outcrop nr. outlet 59.54934	110.43033	10-Jul-02	GH, LA, DH	hand net	rock, pine, saskatoon, cherry	Adult	
4384.00	Lycaenidae	Agriades glandon lacustris	Woodman Lake E, rock outcrop nr. outlet 59.54934	110.43033	10-Jul-02	GH, LA, DH	hand net	rock, pine, saskatoon, cherry	Adult	
4384.00	Lycaenidae	Agriades glandon lacustris	Woodman Lake E, rock outcrop nr. outlet 59.54934	110.43033	10-Jun-02	DM	hand net	rock, pine, saskatoon, cherry	Adult	
4384.00	Lycaenidae	Agriades glandon lacustris	Woodman lake nr outlet, Stream Hill	59.55434	110.47104	07-Jul-02	GH, LA, DH	hand net	riparian area	Adult
4429.00	Nymphalidae	Polygonia faunus hylas	Esker Lake, basecamp	59.55533	110.26314	06-Jun-02	DM	hand net	Salix with Spruce	Adult
4429.00	Nymphalidae	Polygonia faunus hylas	Esker Lake, basecamp	59.55533	110.26314	08-Jun-02	DM	hand net	Salix with Spruce	Adult
4432.00	Nymphalidae	Nymphalis antiopa	Esker Lake S, burn & rock outcrop	59.54148	110.28350	07-Jul-02	GH, LA, DH	hand net	rock outcrop	Adult
4463.00	Nymphalidae	Boloria eunomia dawsoni	Colin Lake W, beach	59.56243	110.22321	09-Jul-02	GH, LA, DH	hand net	sandy beach	Adult
4463.00	Nymphalidae	Boloria eunomia dawsoni	Colin Lake W, beach	59.56243	110.22321	09-Jul-02	GH, LA, DH	hand net	sandy beach	Adult
4463.00	Nymphalidae	Boloria eunomia dawsoni	Colin Lake W, beach	59.56243	110.22321	09-Jul-02	GH, LA, DH	hand net	sandy beach	Adult
4463.00	Nymphalidae	Boloria eunomia dawsoni	Colin Lake W, bog	59.57708	110.22232	10-Jul-02	Nordstrom, W.	hand net	bog	Adult
4463.00	Nymphalidae	Boloria eunomia dawsoni	Colin Lake W, bog	59.57708	110.22232	10-Jul-02	Nordstrom, W.	hand net	bog	Adult
4463.00	Nymphalidae	Boloria eunomia dawsoni	Esker Lake SW	59.53337	110.30593	07-Jul-02	Nordstrom, W.	hand net	bog	Adult

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
4463.00	Nymphalidae	Boloria eunomia dawsoni	Esker Lake SW	59.53337	110.30593	07-Jul-02	Nordstrom, W.	hand net	bog	Adult
4463.00	Nymphalidae	Boloria eunomia dawsoni	Esker Lake, basecamp	59.55533	110.26314	06-Jul-02	GH, LA, DH	hand net	Salix with Spruce	Adult
4463.00	Nymphalidae	Boloria eunomia dawsoni	Esker Lake, basecamp	59.55533	110.26314	06-Jul-02	GH, LA, DH	hand net	Salix with Spruce	Adult
4463.00	Nymphalidae	Boloria eunomia dawsoni	Esker Lake, basecamp	59.55533	110.26314	06-Jul-02	GH, LA, DH	hand net	Salix with Spruce	Adult
4463.00	Nymphalidae	Boloria eunomia dawsoni	Woodman lake nr outlet, Stream Hill	59.55434	110.47104	07-Jul-02	GH, LA, DH	hand net	riparian area	Adult
4463.00	Nymphalidae	Boloria eunomia dawsoni	Woodman lake nr outlet, Stream Hill	59.55434	110.47104	07-Jul-02	GH, LA, DH	hand net	riparian area	Adult
4463.00	Nymphalidae	Boloria eunomia dawsoni	Woodman lake nr outlet, Stream Hill	59.55434	110.47104	07-Jul-02	GH, LA, DH	hand net	riparian area	Adult
4463.00	Nymphalidae	Boloria eunomia dawsoni	Woodman lake nr outlet, Stream Hill	59.55434	110.47104	07-Jul-02	GH, LA, DH	hand net	riparian area	Adult
4463.00	Nymphalidae	Boloria eunomia dawsoni	Woodman lake nr outlet, Stream Hill	59.55434	110.47104	07-Jul-02	GH, LA, DH	hand net	riparian area	Adult
4471.00	Nymphalidae	Boloria freija freija	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	06-Jun-02	DM	hand net	labradour tea,	Adult
4471.00	Nymphalidae	Boloria freija freija	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	06-Jun-02	DM	hand net	sphagnum bogs with Black Spruce, labradour tea and leatherleaf	Adult
4471.00	Nymphalidae	Boloria freija freija	Woodman Lake E, rock outcrop nr. outlet 59.54934	110.43033	11-Jun-02	DM	hand net	rock, pine, saskatoon, cherry		Adult
4522.00	Nymphalidae	Limenitis arthemis rubrofasciata	Colin Lake W, beach	59.56243	110.22321	09-Jul-02	GH, LA, DH	hand net	sandy beach	Adult
4522.00	Nymphalidae	Limenitis arthemis rubrofasciata	Esker Lake S, burn & rock outcrop	59.54148	110.28350	09-Jul-02	GH, LA, DH	hand net		Adult
4522.00	Nymphalidae	Limenitis arthemis rubrofasciata	Esker Lake, basecamp	59.55533	110.26314	08-Jul-02	GH, LA, DH	hand net	Salix with Spruce	Adult
4522.00	Nymphalidae	Limenitis arthemis rubrofasciata	Esker Lake, basecamp	59.55533	110.26314	09-Jul-02	GH, LA, DH	hand net	Salix with Spruce	Adult
4522.00	Nymphalidae	Limenitis arthemis rubrofasciata	Woodman Creek, riparian area	59.54502	110.38846	08-Jul-02	Nordstrom, W.	hand net	riparian area	Adult
4522.00	Nymphalidae	Limenitis arthemis rubrofasciata	Woodman Creek, riparian area	59.54502	110.38846	08-Jul-02	Nordstrom, W.	hand net	riparian area	Adult
4522.00	Nymphalidae	Limenitis arthemis rubrofasciata	Woodman Lake E, rock outcrop nr. outlet 59.54934	110.43033	09-Jul-02	GH, LA, DH	hand net	rock, pine, saskatoon, cherry		Adult
4522.00	Nymphalidae	Limenitis arthemis rubrofasciata	Woodman lake nr outlet, Stream Hill	59.55434	110.47104	07-Jul-02	GH, LA, DH	hand net	riparian area	Adult
4522.00	Nymphalidae	Limenitis arthemis rubrofasciata	Woodman lake nr outlet, Stream Hill	59.55434	110.47104	09-Jul-02	GH, LA, DH	hand net	riparian area	Adult
4523.00	Nymphalidae	Limenitis archippus	Esker Lake SW	59.53337	110.30593	07-Jul-02	Nordstrom, W.	hand net	shrubby wetland	Adult
4523.00	Nymphalidae	Limenitis archippus	Woodman Creek, riparian area	59.54502	110.38846	08-Jul-02	Nordstrom, W.	hand net	riparian area	Adult

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
4596.00	Nymphalidae	<i>Erebia discoidalis discoidalis</i>	Esker Lake, sand esker 4 km W of basecamp	59.55170	110.31406	12-Jun-02	DM	hand net	open sand with pincherry, buffaloberry, sage, juniper, bearberry, and some pine	Adult
4606.00	Nymphalidae	<i>Oeneis chryxus caryi</i>	Esker Lake, sand esker 4 km W of basecamp	59.55170	110.31406	12-Jun-02	DM	hand net	open sand with pincherry, buffaloberry, sage, juniper, bearberry, and some pine	Adult
4703.00	Crambidae	<i>Gesneria centuriella</i>	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
4703.00	Crambidae	<i>Gesneria centuriella</i>	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
4759.00	Crambidae	<i>Parapoynx maculalis</i>	Colin Lake W, bog	59.5325	110.02230	09-Jul-02	Nordstrom, W.	hand net	bog	Adult
4759.00	Crambidae	<i>Parapoynx maculalis</i>	Esker Lake, basecamp	59.55424	110.26317	July 9-10, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
4948.00	Crambidae	<i>Ostrinia marginalis</i>	Woodman Lake, bog at point	59.54934	110.43033	10-Jun-02	DM	hand net	bog	Adult
4953.00	Crambidae	<i>Phlyctaenia coronata</i>	Esker Lake, basecamp	59.55533	110.26180	July 05-06, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
4953.00	Crambidae	<i>Phlyctaenia coronata</i>	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
5060.00	Crambidae	<i>Pyrausta borealis</i>	Woodman Lake, bog at point	59.54934	110.43033	10-Jun-02	DM	hand net	bog	Adult
5391.00	Crambidae	<i>Chrysoteuchia topiaria</i>	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
5391.00	Crambidae	<i>Chrysoteuchia topiaria</i>	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
5391.00	Crambidae	<i>Chrysoteuchia topiaria</i>	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
5391.00	Crambidae	<i>Chrysoteuchia topiaria</i>	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
5391.00	Crambidae	<i>Chrysoteuchia topiaria</i>	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
5391.00	Crambidae	<i>Chrysoteuchia topiaria</i>	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
5529.00	Pyralidae	<i>Herculia thymetusalis</i>	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
5718.00	Pyralidae	<i>Myelopsis subtetricella</i>	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
5718.00	Pyralidae	<i>Myelopsis subtetricella</i>	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
5718.00	Pyralidae	<i>Myelopsis subtetricella</i>	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
5718.00	Pyralidae	<i>Myelopsis subtetricella</i>	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
5718.00	Pyralidae	<i>Myelopsis subtetricella</i>	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
5718.00	Pyralidae	<i>Myelopsis subtetricella</i>	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
5718.00	Pyralidae	Myelopsis subtetricella	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
5718.00	Pyralidae	Myelopsis subtetricella	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
5969.99	Pyralidae	Zophodia grossulariella	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	08-Jun-02	DM	MV light	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
6076.00	Pyralidae	Pyralidae sp. 1	Esker Lake, sand esker 4 km W of basecamp	59.55170	110.31406	12-Jun-02	DM	hand net	open sand with pincherry, buffaloberry, sage, juniper, bearberry, and some pine	Adult
6088.91	Pyralidae	Phycitinae sp. 1	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
6088.91	Pyralidae	Phycitinae sp. 1	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54351	110.31531	12-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
6088.92	Pyralidae	Phycitinae sp. 2	Esker Lake, sand esker 500m NW of basecamp	59.55715	110.27490	13-Jun-02	DM	MV light	open sand with sage, juniper, bearberry, and some pine	Adult
6094.00	Pterophoridae	Capperia ningoris	Esker Lake, basecamp	59.55533	110.26314	08-Jul-02	GH, LA, DH	malaise trap	Salix with Spruce	Adult
6118.00	Pterophoridae	Amblyptilia pica	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	06-Jun-02	DM	hand net	open sand with sage, juniper, bearberry, and some pine	Adult
6251.00	Drepanidae	Drepana arcuata	Colin Lake W, beach	59.56243	110.22321	09-Jul-02	GH, LA, DH	hand net	sandy beach	Adult
6252.00	Drepanidae	Drepana bilineata	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	12-Jun-02	DM	MV trap	white spruce & birch	Adult
6321.00	Geometridae	Epelis tuncataria	Esker Lake, bog 800m NW of basecamp	59.55748	110.27329	09-Jun-02	DM	hand net	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
6321.00	Geometridae	Epelis tuncataria	Esker Lake, bog 800m NW of basecamp	59.55748	110.27329	09-Jun-02	DM	hand net	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
6396.00	Geometridae	Semiothisa neptaria	Esker Lake, basecamp	59.55533	110.26314	06-Jun-02	DM	MV trap	Salix with Spruce	Adult
6396.00	Geometridae	Semiothisa neptaria	Esker Lake, basecamp	59.55424	110.26317	July 8-9, 2002	GH, LA, DH	UV 13	Salix with Spruce	Adult
6396.00	Geometridae	Semiothisa neptaria	Esker Lake, basecamp	59.55424	110.26317	July 8-9, 2002	GH, LA, DH	UV 13	Salix with Spruce	Adult
6396.00	Geometridae	Semiothisa neptaria	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54351	110.31531	12-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
6396.00	Geometridae	Semiothisa neptaria	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54351	110.31531	12-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
6396.00	Geometridae	Semiothisa neptaria	Woodman Lake E, rock outcrop nr. outlet 59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult	
6396.00	Geometridae	Semiothisa neptaria	Woodman Lake E, rock outcrop nr. outlet 59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult	
6396.00	Geometridae	Semiothisa neptaria	Woodman Lake E, rock outcrop nr. outlet 59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult	
6396.00	Geometridae	Semiothisa neptaria	Woodman Lake E, rock outcrop nr. outlet 59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult	

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
6396.00	Geometridae	Semiothisa neptaria	Woodman Lake E, rock outcrop nr. outlet	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
6396.00	Geometridae	Semiothisa neptaria	Woodman Lake E, rock outcrop nr. outlet	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
6396.00	Geometridae	Semiothisa neptaria	Woodman Lake E, rock outcrop nr. outlet	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
6570.00	Geometridae	Aethalura intertexta	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	07-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
6570.00	Geometridae	Aethalura intertexta	Esker Lake, grassy ridge SE of basecamp	59.54953	110.25416	11-Jun-02	DM	UV trap	Aspen & Spruce	Adult
6570.00	Geometridae	Aethalura intertexta	Esker Lake, grassy ridge SE of basecamp	59.54953	110.25416	11-Jun-02	DM	UV trap	Aspen & Spruce	Adult
6570.00	Geometridae	Aethalura intertexta	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
6570.00	Geometridae	Aethalura intertexta	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
6570.00	Geometridae	Aethalura intertexta	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
6570.00	Geometridae	Aethalura intertexta	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
6570.00	Geometridae	Aethalura intertexta	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
6570.00	Geometridae	Aethalura intertexta	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
6570.00	Geometridae	Aethalura intertexta	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
6570.00	Geometridae	Aethalura intertexta	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
6570.00	Geometridae	Aethalura intertexta	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	07-Jun-02	DM	UV trap	white spruce & birch	Adult
6570.00	Geometridae	Aethalura intertexta	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54351	110.31531	12-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
6570.00	Geometridae	Aethalura intertexta	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54351	110.31531	12-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
6570.00	Geometridae	Aethalura intertexta	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54351	110.31531	12-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
6597.00	Geometridae	Ectropis crepuscularia	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	12-Jun-02	DM	UV trap	white spruce & birch	Adult

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
6598.00	Geometridae	Protoboarmia porcelaria	Esker Lake, basecamp	59.55533	110.26314	08-Jul-02	GH, LA, DH	UV 8	Salix with Spruce	Adult
6598.00	Geometridae	Protoboarmia porcelaria	Esker Lake, basecamp	59.55424	110.26317	July 5-6, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
6796.00	Geometridae	Campaea perlata	Esker Lake, basecamp	59.55533	110.26314	10-Jul-02	GH, LA, DH	hand net	Salix with Spruce	Adult
6799.00	Geometridae	Epirranthis substriataria	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	12-Jun-02	DM	UV trap	white spruce & birch	Adult
6818.00	Geometridae	Selenia kentaria	Esker Lake, basecamp	59.55533	110.26314	06-Jun-02	DM	UV trap	Salix with Spruce	Adult
6818.00	Geometridae	Selenia kentaria	Esker Lake, basecamp	59.55533	110.26314	06-Jun-02	DM	UV trap	Salix with Spruce	Adult
6818.00	Geometridae	Selenia kentaria	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	07-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
6818.00	Geometridae	Selenia kentaria	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	07-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
6818.00	Geometridae	Selenia kentaria	Esker Lake, grassy ridge SE of basecamp	59.54953	110.25416	11-Jun-02	DM	UV trap	Aspen & Spruce	Adult
6818.00	Geometridae	Selenia kentaria	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
6818.00	Geometridae	Selenia kentaria	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
6818.00	Geometridae	Selenia kentaria	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
6818.00	Geometridae	Selenia kentaria	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
6836.00	Geometridae	Anagoga occiduaria	Colin Lake W, beach	59.56243	110.22321	09-Jul-02	GH, LA, DH	hand net	Island	Adult
6842.00	Geometridae	Plagodis phlogosaria	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54351	110.31531	12-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
6842.00	Geometridae	Plagodis phlogosaria	Woodman Lake E, rock outcrop nr. outlet	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
6844.00	Geometridae	Plagotis alcoolaria	Esker Lake, basecamp	59.55424	110.26317	July 8-9, 2002	GH, LA, DH	UV 13	Salix with Spruce	Adult
6844.00	Geometridae	Plagotis alcoolaria	Esker Lake, basecamp	59.55424	110.26317	July 8-9, 2002	GH, LA, DH	UV 8	Salix with Spruce	Adult
6885.00	Geometridae	Besma quercivoraria	Esker Lake, basecamp	59.55424	110.26317	July 7-9, 2002	GH, LA, DH	UV 14	Salix with Spruce	Adult
7047.00	Geometridae	Nemoria rubrifrontaria	Woodman Lake E, rock outcrop nr. outlet	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
7085.00	Geometridae	Mesothea incerata	Esker Lake, bog 800m NW of basecamp	59.55748	110.27329	09-Jun-02	DM	hand net	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
7085.00	Geometridae	Mesothea incerata	Woodman Lake E, rock outcrop nr. outlet	59.54934	110.43033	10-Jun-02	DM	hand net	rock, pine, saskatoon, cherry	Adult
7139.00	Geometridae	Cyclophora pendulinaria	Esker Lake, basecamp	59.55424	110.26317	July 7-9, 2002	GH, LA, DH	UV 14	Salix with Spruce	Adult

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
7139.00	Geometridae	Cyclophora pendulinaria	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
7139.00	Geometridae	Cyclophora pendulinaria	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54351	110.31531	12-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
7139.00	Geometridae	Cyclophora pendulinaria	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54351	110.31531	12-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
7139.00	Geometridae	Cyclophora pendulinaria	Woodman Lake E, rock outcrop nr. outlet	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
7166.00	Geometridae	Scopula frigidaria	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
7169.00	Geometridae	Scopula inductata	Colin Lake W, beach	59.56243	110.22321	09-Jul-02	GH, LA, DH	hand net	sandy beach	Adult
7169.00	Geometridae	Scopula inductata	Esker Lake, basecamp	59.55533	110.26314	06-Jul-02	GH, LA, DH	hand net	Salix with Spruce	Adult
7293.00	Geometridae	Rheumaptera hastata	Woodman lake nr outlet, Stream Hill	59.55434	110.47104	07-Jul-02	GH, LA, DH	hand net	riparian area	Adult
7399.00	Geometridae	Euphyia unangulata	Esker Lake S, rock outcrop	59.53561	110.26942	07-Jul-02	Nordstrom, W.	hand net	rock outcrop	Adult
7605.99	Geometridae	Eupithecia sp.	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
7605.99	Geometridae	Eupithecia sp.	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	06-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
7605.99	Geometridae	Eupithecia sp.	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	06-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
7605.99	Geometridae	Eupithecia sp.	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	06-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
7605.99	Geometridae	Eupithecia sp.	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	06-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
7605.99	Geometridae	Eupithecia sp.	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	06-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
7605.99	Geometridae	Eupithecia sp.	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	08-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
7605.99	Geometridae	Eupithecia sp.	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	08-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
7605.99	Geometridae	Eupithecia sp.	Esker Lake, grassy ridge SE of basecamp	59.54953	110.25416	11-Jun-02	DM	UV trap	aspen and spruce	Adult
7605.99	Geometridae	Eupithecia sp.	Esker Lake, grassy ridge SE of basecamp	59.54953	110.25416	11-Jun-02	DM	UV trap	aspen and spruce	Adult
7605.99	Geometridae	Eupithecia sp.	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	06-Jun-02	DM	UV trap	open sand with sage, juniper, bearberry, and some pine	Adult

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
7605.99	Geometridae	Eupithecia sp.	Woodman Lake E, rock outcrop nr. outlet 59.54934	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
7637.00	Geometridae	Cladara limitaria	Esker Lake, basecamp	59.55533	110.26314	07-Jun-02	DM	MV trap	Salix with Spruce	Adult
7637.00	Geometridae	Cladara limitaria	Esker Lake, basecamp	59.55533	110.26314	07-Jun-02	DM	MV trap	Salix with Spruce	Adult
7637.00	Geometridae	Cladara limitaria	Esker Lake, basecamp	59.55533	110.26314	07-Jun-02	DM	MV trap	Salix with Spruce	Adult
7637.00	Geometridae	Cladara limitaria	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	06-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
7637.00	Geometridae	Cladara limitaria	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	08-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
7637.00	Geometridae	Cladara limitaria	Esker Lake, grassy ridge SE of basecamp	59.54953	110.25416	11-Jun-02	DM	UV trap	Aspen & Spruce	Adult
7637.00	Geometridae	Cladara limitaria	Esker Lake, grassy ridge SE of basecamp	59.54953	110.25416	14-Jun-02	DM	UV trap	aspen and spruce	Adult
7637.00	Geometridae	Cladara limitaria	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	12-Jun-02	DM	MV trap	white spruce & birch	Adult
7637.00	Geometridae	Cladara limitaria	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	08-Jun-02	DM	UV trap	open sand with sage, juniper, bearberry, and some pine	Adult
7639.00	Geometridae	Cladara atroliturata	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
7639.00	Geometridae	Cladara atroliturata	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	12-Jun-02	DM	MV trap	white spruce & birch	Adult
7639.00	Geometridae	Cladara atroliturata	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	08-Jun-02	DM	UV trap	open sand with sage, juniper, bearberry, and some pine	Adult
7687.00	Lasiocampidae	Phyllodesma americanum	Esker Lake, basecamp	59.55533	110.26314	08-Jul-02	GH, LA, DH	hand net	Salix with Spruce	Adult
7687.00	Lasiocampidae	Phyllodesma americanum	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	07-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
7687.00	Lasiocampidae	Phyllodesma americanum	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
7687.00	Lasiocampidae	Phyllodesma americanum	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
7687.00	Lasiocampidae	Phyllodesma americanum	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
7687.00	Lasiocampidae	Phyllodesma americanum	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
7687.00	Lasiocampidae	Phyllodesma americanum	Woodman Lake E, rock outcrop nr. outlet 59.54934	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
7687.00	Lasiocampidae	Phyllodesma americanum	Woodman Lake E, rock outcrop nr. outlet 59.54934	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
7687.00	Lasiocampidae	Phyllodesma americanum	Woodman Lake E, rock outcrop nr. outlet 59.54934	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
7687.00	Lasiocampidae	Phyllodesma americanum	Woodman Lake E, rock outcrop nr. outlet 59.54934	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
7687.00	Lasiocampidae	Phyllodesma americanum	Woodman Lake E, rock outcrop nr. outlet 59.54934	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
7769.00	Saturnidae	Hyalophora gloveri	Esker Lake, sand esker 4 km W of basecamp	59.55170	110.31406	12-Jun-02	DM	hand collected	open sand with pincherry, buffaloberry, sage, juniper, bearberry, and some pine	Cocoon
7821.00	Sphingidae	Smerinthus jamaicensis	Esker Lake, grassy ridge SE of basecamp	59.54953	110.25416	14-Jun-02	DM	UV trap	aspen and spruce	Adult
7822.00	Sphingidae	Smerinthus cerisyi	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	12-Jun-02	DM	MV trap	white spruce & birch	Adult
7853.00	Sphingidae	Hemaris thysbe	Esker Lake, basecamp	59.55533	110.26314	11-Jul-02	GH, LA, DH	hand net	Salix with Spruce	Adult
7853.00	Sphingidae	Hemaris thysbe	Esker Lake, sand esker 4 km W of basecamp	59.55170	110.31406	12-Jun-02	DM	hand net	open sand with pincherry, buffaloberry, sage, juniper, bearberry, and some pine	Adult
7853.00	Sphingidae	Hemaris thysbe	Woodman lake nr outlet, Stream Hill	59.55434	110.47104	07-Jul-02	GH, LA, DH	hand net	riparian area	Adult
7900.00	Notodontidae	Closteria brucei	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54351	110.31531	12-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
7900.00	Notodontidae	Closteria brucei	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54351	110.31531	12-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
7915.00	Notodontidae	Nadata gibbosa	Esker Lake, basecamp	59.55533	110.26314	06-Jul-02	GH, LA, DH	UV trap	Salix with Spruce	Adult
7915.00	Notodontidae	Nadata gibbosa	Esker Lake, basecamp	59.55533	110.26314	08-Jul-02	GH, LA, DH	UV trap	Salix with Spruce	Adult
8137.00	Arctiidae	Spilosoma virginica	Colin Lake W, beach	59.56302	110.22846	09-Jul-02	Johnston, T.	hand net	sandy beach	Adult
8137.00	Arctiidae	Spilosoma virginica	Esker Lake, basecamp	59.55533	110.26314	11-Jul-02	GH, LA, DH	UV trap	Salix with Spruce	Adult
8137.00	Arctiidae	Spilosoma virginica	Esker Lake, basecamp	59.55533	110.26314	11-Jul-02	GH, LA, DH	UV trap	Salix with Spruce	Adult
8162.00	Arctiidae	Platarctia parthenos	Esker Lake, basecamp	59.55533	110.26314	11-Jul-02	GH, LA, DH	UV trap	Salix with Spruce	Adult
8356.00	Noctuidae	Chytolita petrealis	Esker Lake, basecamp	59.55533	110.26314	08-Jul-02	Nordstrom, W.	hand net	white spruce & birch	Adult
8356.00	Noctuidae	Chytolita petrealis	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
8356.00	Noctuidae	Chytolita petrealis	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
8356.00	Noctuidae	Chytolita petrealis	Esker Lake, basecamp	59.55424	110.26317	July 5-6, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
8397.00	Noctuidae	Palthis angulalis	Esker Lake, basecamp	59.55424	110.26317	July 8-9, 2002	GH, LA, DH	UV 8	Salix with Spruce	Adult
8397.00	Noctuidae	Palthis angulalis	Esker Lake, basecamp	59.55533	110.26180	July 08-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
8397.00	Noctuidae	Palthus angulalis	Woodman Lake E, rock outcrop nr. outlet 59.54934	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
8455.00	Noctuidae	Lomanaltes eductalis	Colin Lake	?	?	08-Jul-02	Johnston, T.	hand net		Adult
8555.00	Noctuidae	Scoliopteryx libatrix	Esker Lake, grassy ridge SE of basecamp	59.54953	110.25416	14-Jun-02	DM	UV trap	aspen and spruce	Adult
8555.00	Noctuidae	Scoliopteryx libatrix	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	12-Jun-02	DM	MV trap	white spruce & birch	Adult
8632.00	Noctuidae	Drasteria hudsonica	Esker Lake, basecamp	59.55533	110.26314	06-Jul-02	GH, LA, DH	hand net	Salix with Spruce	Adult
8632.00	Noctuidae	Drasteria hudsonica	Esker Lake, basecamp	59.55424	110.26317	July 6-7, 2002	GH, LA, DH	hand net	Salix with Spruce	Adult
8632.00	Noctuidae	Drasteria hudsonica	Esker Lake, sand esker 4 km W of basecamp	59.55170	110.31406	12-Jun-02	DM	hand net	open sand with pincherry, buffaloberry, sage, juniper, bearberry, and some pine	Adult
8632.00	Noctuidae	Drasteria hudsonica	Esker Lake, sand esker 4 km W of basecamp	59.55170	110.31406	12-Jun-02	DM	hand net	open sand with pincherry, buffaloberry, sage, juniper, bearberry, and some pine	Adult
8703.00	Noctuidae	Zale duplicata	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54351	110.31531	12-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
8950.00	Noctuidae	Plusia putnami	Esker Lake, basecamp	59.55533	110.26314	09-Jul-02	GH, LA, DH	UV trap	Salix with Spruce	Adult
9048.00	Noctuidae	Lithacodia albidula	Esker Lake, basecamp	59.55533	110.26180	July 07-09, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
9203.00	Noctuidae	Acronicta dactylina	Esker Lake, basecamp	59.55424	110.26317	July 9-10, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
9212.00	Noctuidae	Acronicta grisea	Esker Lake, basecamp	59.55424	110.26317	July 8-9, 2002	GH, LA, DH	UV 8	Salix with Spruce	Adult
9212.00	Noctuidae	Acronicta grisea	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	12-Jun-02	DM	MV trap	white spruce & birch	Adult
9261.00	Noctuidae	Acronicta impressa	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54351	110.31531	12-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
9556.00	Noctuidae	Chytonix palliatricula	Esker Lake, basecamp	59.55424	110.26317	July 8-9, 2002	GH, LA, DH	UV 8	Salix with Spruce	Adult
9875.00	Noctuidae	Xylena thoracica	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	06-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
9875.00	Noctuidae	Xylena thoracica	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	06-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
9875.00	Noctuidae	Xylena thoracica	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	06-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
9875.00	Noctuidae	Xylena thoracica	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	07-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
9875.00	Noctuidae	Xylena thoracica	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	12-Jun-02	DM	MV trap	white spruce & birch	Adult
9875.00	Noctuidae	Xylena thoracica	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	07-Jun-02	DM	UV trap	white spruce & birch	Adult

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
9875.00	Noctuidae	Xylena thoracica	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	07-Jun-02	DM	UV trap	white spruce & birch	Adult
9875.00	Noctuidae	Xylena thoracica	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	07-Jun-02	DM	UV trap	white spruce & birch	Adult
9875.00	Noctuidae	Xylena thoracica	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	07-Jun-02	DM	UV trap	white spruce & birch	Adult
9875.00	Noctuidae	Xylena thoracica	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	07-Jun-02	DM	UV trap	white spruce & birch	Adult
9875.00	Noctuidae	Xylena thoracica	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	09-Jun-02	DM	UV trap	open sand with sage, juniper, bearberry, and some pine	Adult
9888.00	Noctuidae	Lithophane innomoinata	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	07-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
9888.00	Noctuidae	Lithophane innomoinata	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	12-Jun-02	DM	MV trap	white spruce & birch	Adult
9909.00	Noctuidae	Lithophane tepida	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
9909.00	Noctuidae	Lithophane tepida	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54351	110.31531	12-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
9909.00	Noctuidae	Lithophane tepida	Woodman Lake E, rock outcrop nr. outlet	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
9917.00	Noctuidae	Lithophane fagina	Esker Lake, grassy ridge SE of basecamp	59.54953	110.25416	11-Jun-02	DM	UV trap	Aspen & Spruce	Adult
9917.00	Noctuidae	Lithophane fagina	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	12-Jun-02	DM	MV trap	white spruce & birch	Adult
9917.00	Noctuidae	Lithophane fagina	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54351	110.31531	12-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
9922.00	Noctuidae	Lithophane pexata	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	07-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
9922.00	Noctuidae	Lithophane pexata	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	08-Jun-02	DM	UV trap	open sand with sage, juniper, bearberry, and some pine	Adult
9928.00	Noctuidae	Lithophane thaxteri	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	07-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
9928.00	Noctuidae	Lithophane thaxteri	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
10005.00	Noctuidae	Feralia jocosa	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	12-Jun-02	DM	MV trap	white spruce & birch	Adult
10008.00	Noctuidae	Feralia comstocki	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	08-Jun-02	DM	UV trap	open sand with sage, juniper, bearberry, and some pine	Adult
10268.00	Noctuidae	Sideridis maryx	Woodman Lake E, rock outcrop nr. outlet	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
10289.00	Noctuidae	Orthodes goodelli	Esker Lake, basecamp	59.55424	110.26317	July 7-9, 2002	GH, LA, DH	UV 14	Salix with Spruce	Adult
10290.00	Noctuidae	Orthodes obscura	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	06-Jun-02	DM	UV trap	open sand with sage, juniper, bearberry, and some pine	Adult

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
10312.00	Noctuidae	Papestra cristifera	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	12-Jun-02	DM	MV trap	white spruce & birch	Adult
10332.00	Noctuidae	Anarta luteola	Colin Lake E, sand beach	59.58000	110.06000	11-Jun-02	DM	hand net	Pine and bearberry	Adult
10332.00	Noctuidae	Anarta luteola	Esker Lake, basecamp	59.55533	110.26314	06-Jun-02	DM	hand net	Salix with Spruce	Adult
10332.00	Noctuidae	Anarta luteola	Esker Lake, basecamp	59.55533	110.26314	06-Jun-02	DM	hand net	Salix with Spruce	Adult
10332.00	Noctuidae	Anarta luteola	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	08-Jun-02	DM	hand net	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
10332.00	Noctuidae	Anarta luteola	Esker Lake, sand esker 4 km W of basecamp	59.55170	110.31406	12-Jun-02	DM	hand net	open sand with pincherry, buffaloberry, sage, juniper, bearberry, and some pine	Adult
10332.00	Noctuidae	Anarta luteola	Esker Lake, sand esker 4 km W of basecamp	59.55170	110.31406	12-Jun-02	DM	hand net	open sand with pincherry, buffaloberry, sage, juniper, bearberry, and some pine	Adult
10332.00	Noctuidae	Anarta luteola	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	09-Jun-02	DM	hand net	open sand with sage, juniper, bearberry, and some pine	Adult
10338.00	Noctuidae	Trichordestra liquida	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	08-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
10338.00	Noctuidae	Trichordestra liquida	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	12-Jun-02	DM	MV trap	white spruce & birch	Adult
10338.00	Noctuidae	Trichordestra liquida	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	12-Jun-02	DM	MV trap	white spruce & birch	Adult
10372.00	Noctuidae	Lacinipolia anguina	Esker Lake, basecamp	59.55424	110.26317	July 7-9, 2002	GH, LA, DH	UV 14	Salix with Spruce	Adult
10372.00	Noctuidae	Lacinipolia anguina	Esker Lake, basecamp	59.55424	110.26317	July 7-9, 2002	GH, LA, DH	UV 14	Salix with Spruce	Adult
10372.00	Noctuidae	Lacinipolia anguina	Esker Lake, basecamp	59.55424	110.26317	July 8-9, 2002	GH, LA, DH	UV 8	Salix with Spruce	Adult
10372.00	Noctuidae	Lacinipolia anguina	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	08-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
10372.00	Noctuidae	Lacinipolia anguina	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54351	110.31531	12-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
10372.00	Noctuidae	Lacinipolia anguina	Woodman Lake E, rock outcrop nr. outlet	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
10372.00	Noctuidae	Lacinipolia anguina	Woodman Lake E, rock outcrop nr. outlet	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
10372.00	Noctuidae	Lacinipolia anguina	Woodman Lake E, rock outcrop nr. outlet	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
10372.00	Noctuidae	Lacinipolia anguina	Woodman Lake E, rock outcrop nr. outlet	59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
10406.00	Noctuidae	Lacinipolia olivacea	Esker Lake, basecamp	59.55533	110.26180	July 10-11, 2002	GH, LA, DH	UV trap	Salix with Spruce	Adult
10490.00	Noctuidae	Orthosia revicta	Esker Lake, basecamp	59.55533	110.26314	06-Jun-02	DM	UV trap	Salix with Spruce	Adult

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, basecamp	59.55533	110.26314	07-Jun-02	DM	UV trap	Salix with Spruce	Adult
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, basecamp	59.55533	110.26314	07-Jun-02	DM	UV trap	Salix with Spruce	Adult
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	08-Jun-02	DM	MV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	08-Jun-02	DM	MV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	08-Jun-02	DM	MV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	06-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	06-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, bog 100m SE of basecamp	59.55504	110.26177	08-Jun-02	DM	UV trap	sphagnum bogs with Black Spruce, labrador tea and leatherleaf	Adult
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, grassy ridge SE of basecamp	59.54953	110.25416	11-Jun-02	DM	UV trap	Aspen & Spruce	Adult
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, grassy ridge SE of basecamp	59.54953	110.25416	11-Jun-02	DM	UV trap	Aspen & Spruce	Adult
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, grassy ridge SE of basecamp	59.54953	110.25416	11-Jun-02	DM	UV trap	Aspen & Spruce	Adult
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, lakeshore 4km W of basecamp	59.54445	110.32885	09-Jun-02	DM	UV trap	birch, aspen, pine & blueberry	Adult
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	12-Jun-02	DM	MV trap	white spruce & birch	Adult
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	07-Jun-02	DM	UV trap	white spruce & birch	Adult
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	07-Jun-02	DM	UV trap	white spruce & birch	Adult
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	07-Jun-02	DM	UV trap	white spruce & birch	Adult
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, rock outcrop 3.4 km W of basecamp	59.54351	110.31531	12-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry	Adult
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	08-Jun-02	DM	UV trap	open sand with sage, juniper, bearberry, and some pine	Adult
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	08-Jun-02	DM	UV trap	open sand with sage, juniper, bearberry, and some pine	Adult
10490.00	Noctuidae	<i>Orthosia revicta</i>	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	08-Jun-02	DM	UV trap	open sand with sage, juniper, bearberry, and some pine	Adult

MONA No.	Family	Genus species subspecies	Locality	Dec. Lat.	Dec. Long.	Date	Collector	Method	Habitat	Life Stage
10490.00	Noctuidae	Orthosia revicta	Woodman Lake E, rock outcrop nr. outlet 59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry		Adult
10490.00	Noctuidae	Orthosia revicta	Woodman Lake E, rock outcrop nr. outlet 59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry		Adult
10490.00	Noctuidae	Orthosia revicta	Woodman Lake E, rock outcrop nr. outlet 59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry		Adult
10490.00	Noctuidae	Orthosia revicta	Woodman Lake E, rock outcrop nr. outlet 59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry		Adult
10493.00	Noctuidae	Orthosia segregata	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	09-Jun-02	DM	UV trap	open sand with sage, juniper, bearberry, and some pine	Adult
10660.00	Noctuidae	Agrotis obliqua	Esker Lake, basecamp	59.55424	110.26317	July 7-9, 2002	GH, LA, DH	UV 14	Salix with Spruce	Adult
10660.00	Noctuidae	Agrotis obliqua	Woodman Lake E, rock outcrop nr. outlet 59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry		Adult
10660.00	Noctuidae	Agrotis obliqua	Woodman Lake E, rock outcrop nr. outlet 59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry		Adult
10660.00	Noctuidae	Agrotis obliqua	Woodman Lake E, rock outcrop nr. outlet 59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry		Adult
10660.00	Noctuidae	Agrotis obliqua	Woodman Lake E, rock outcrop nr. outlet 59.54934	110.43033	10-Jun-02	DM	UV trap	rock, pine, saskatoon, cherry		Adult
11081.00	Noctuidae	Heliothis borealis	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	14-Jun-02	DM	UV trap	open sand with sage, juniper, bearberry, and some pine	Adult
11081.00	Noctuidae	Heliothis borealis	Esker Lake, sand esker 500m NW of basecamp	59.54953	110.25416	14-Jun-02	DM	UV trap	open sand with sage, juniper, bearberry, and some pine	Adult
11233.93	Noctuidae	?	Esker Lake, oldgrowth forest 300m SE of basecamp	59.55363	110.26167	07-Jun-02	DM	UV trap	white spruce & birch	Adult

Appendix 3. Collection sites within Colin-Cornwall Wildland Park. The distance between the blue vertical and horizontal lines on the topographic map is 10 km.

