

SPIDER RECORDS FROM COLIN-CORNWALL LAKES WILDLAND PROVINCIAL PARK



Larinioides cornutus
(Photo by D. Buckle)



Thanatus coloradensis
(Photo by D. Buckle)

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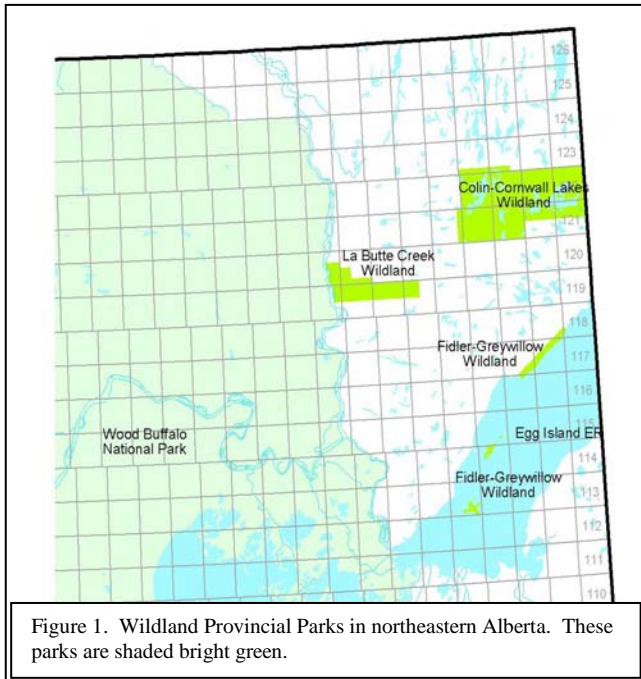
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1. Introduction

Three wildland provincial parks and one ecological reserve have been established in the northeast corner of Alberta (Figure 1). Colin-Cornwall Lakes, Fidler-Greywillow and La Butte Creek Wildland Provincial Parks are located in the Canadian Shield Natural Region. Egg Island Ecological Reserve, within Lake Athabasca, is also located in that Natural Region (Alberta Environmental Protection 1998). Note that Fidler-Greywillow is comprised of a strip of mainland plus some islands in Lake Athabasca.



These protected areas contain numerous and important examples of Alberta's biodiversity. Much of it is poorly understood or unknown, particularly the invertebrate fauna. The spider fauna is no exception. The spider specimens that were collected in Colin-Cornwall Lakes Wildland Provincial Park during this survey were the first for this area.

As Aitchison and Sutherland (2000) stated, "...information on the composition and functioning of the boreal forest arachnid community [in Canada] remains sketchy".

In Canada there are approximately 1400 known spider species (Bennett 1999, Aitchison and Sutherland 2000). The Biological Survey of Canada estimates that there are at most 1,500 spider species in the country (Bennett 1999).

Holmberg and Buckle (2002) noted that there are 662 species in 23 families for Alberta and Saskatchewan combined. Within Alberta, there are 526 known spider species in 22 families, with at least another 100 or so species to be collected or described (Buckle and Holmberg 2001).

2. The Study Site

Colin-Cornwall Lakes Wildland Park (Figure 2) was established in January of 1998. It is located about 100 km northeast of Fort Chipewyan and lies adjacent to the Saskatchewan border. The majority of the park drains eastward into Lake Athabasca; Cornwall Lake drains into the Slave River. The park encompasses an area of 704 km² of granitic uplands, lakes, creeks, shorelands and wetlands in the Kazan Upland Subregion of the Canadian Shield Natural Region. Along with the classic granitic outcrops and deep clear lakes typical of the Canadian Shield, there are extensive glaciofluvial deposits and numerous wetland complexes located within the park. Areas of discontinuous permafrost are present in the park.

Wildfires have occurred within the park (some being relatively recent) and extensive areas show the evidence of past burns. Those areas are now regenerating.

A planimetric map and legal description of the park is available on the following URL:
<http://www.cd.gov.ab.ca/preserving/parks/lrm/wildland/Colincor.pdf>

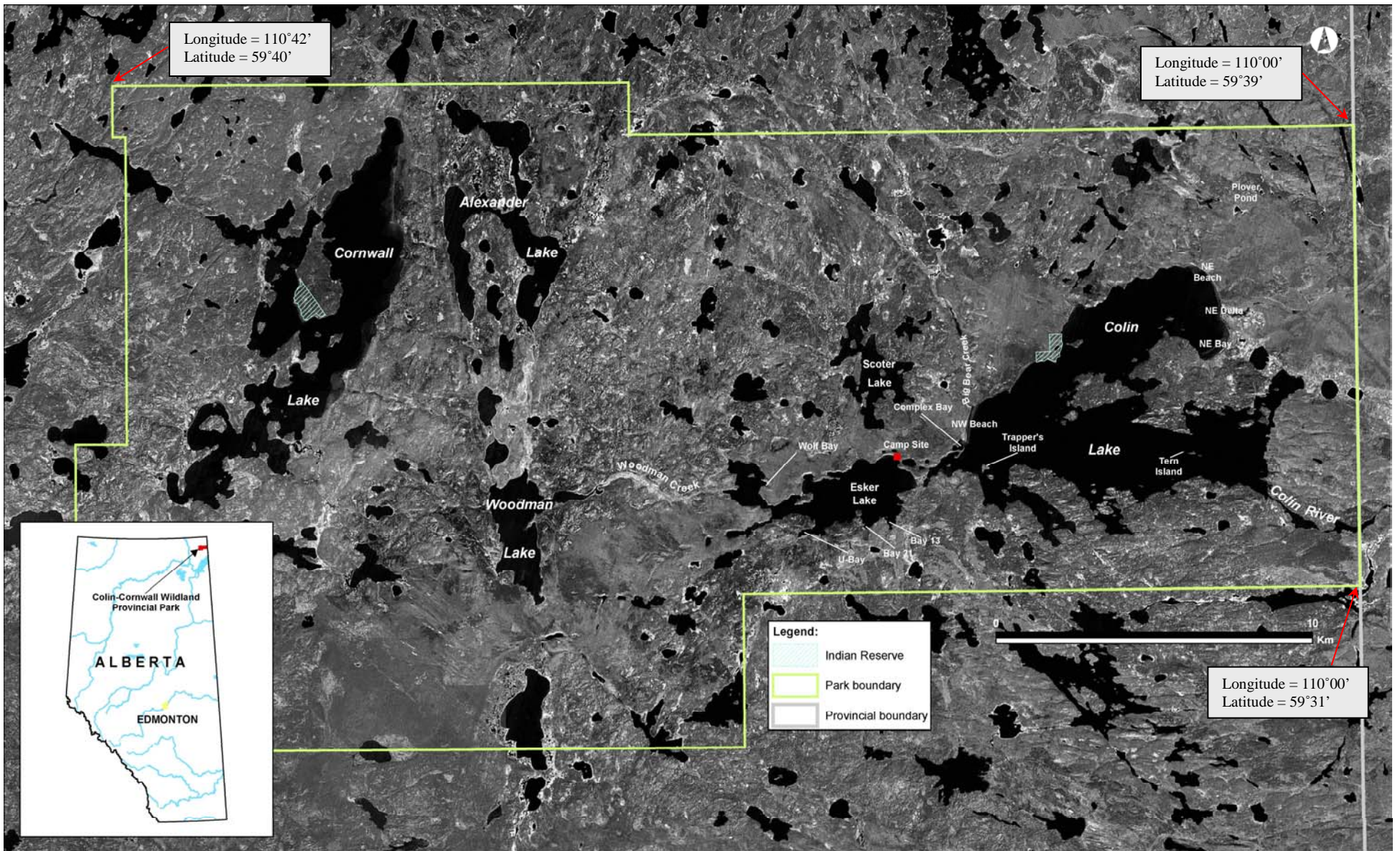


Figure 2. Location and selected geographic features of Colin-Cornwall Lakes Wildland Provincial Park.

The diversity of landscapes and habitats in the park (see the following images) supports a wide variety of plant and animal species. Many species found here are typical of those known from the Canadian Shield region of northern Alberta. Others are poorly understood in terms of their presence, numbers and distribution. This is the case for the spider fauna of the area.



Colin Lake shoreline



Pond near Esker Lake



Esker Lake (ridge on NE backshore)



Woodman Creek



Regenerating burn area

3. Methods

3.1 Survey Dates:

Field surveys to document the biophysical features of Colin-Cornwall Lakes Wildland Provincial Park were conducted during the spring and summer of 2002 by staff of the Parks and Protected Areas Division and a multi-disciplinary team of volunteers. The park was visited from 6-14 June and 5-10 July 2002 (both inclusive). Spiders were one component of the survey and were collected during those time periods.

3.2 Collection of Spiders:

Spiders were collected from a wide variety of habitats in the park using a variety of methods, ranging from random hand-picking to a series of pit and pan traps (Finnamore *et al.* 2001). Some spiders were obtained from the Malaise and UV traps that were used by other researchers to collect moths and other insects. Spiders were also collected by sweep-netting vegetation. All specimens were preserved in 95% ethanol.

Pan and pit traps were placed randomly in depressions dug in beach/shoreline habitats and as well as in a variety of bog areas and upland forested sites. Pit traps were made from white plastic containers (~10cm diameter x 12 cm deep). The pan traps were shallow relatively large plastic bowls (273 mm diameter x 79 mm deep) and were yellow in color (safety yellow in North America). Care was taken to minimize disturbance to the adjacent microhabitats. The rims of the pan and pit traps were set level with the soil or litter surface. Their outside surrounding edges were filled with soil and detritus from the excavation and carefully worked flush with the rim. This provided a surface for spiders to travel unimpeded up to the rim and into the trap. Soil and other detritus were removed from the trap and water was added. A few drops of detergent were added to the water as a surfactant. Flagging tape was used to mark the trap's location. Traps were serviced every two to four days, at which time spiders were removed by sieving through fine-mesh cloth, rinsed in water and placed in labelled vials containing 95% ethanol.

3.3 Identification of Spiders:

Spider specimens were identified by the junior author and will be deposited in the E.H. Strickland Entomological Museum in the Earth Sciences Building at the University of Alberta in Edmonton.

4. Results and Discussion

There were 108 spider species collected during this study from 15 spider families (Table 1). This is 21% (108/526) of the spider species known to occur in Alberta. In their work in northern Manitoba, Aitchison and Sutherland (2000) collected only 49 spider species from 13 families, which is considerably less than what was obtained in the present study. Most of the specimens that were collected in this study were from common, wide ranging species.

Table 1. Number of spider species and specimens in each family that were collected from Colin-Cornwall Wildland Provincial Park. Families are listed in descending order of abundance of specimens. All of the specimens are adults.

Family	Species		Specimens	
	Number	Percent	Number	Percent
Lycosidae	17	15.7	458	56.8
Gnaphosidae	15	13.9	134	16.6
Linyphiidae	23	21.3	44	5.6
Thomisidae	7	6.5	29	3.6
Salticidae	10	9.3	29	3.6
Philodromidae	8	7.4	22	2.7
Tetragnathidae	6	5.6	17	2.1
Titanoecidae	1	0.9	16	2.0
Araneidae	5	4.6	13	1.6
Agelenidae	1	0.9	13	1.6
Dictynidae	2	1.9	10	1.2
Theridiidae	6	5.6	10	1.2
Clubionidae	5	4.6	7	0.9
Pisauridae	1	0.9	3	0.4
Amaurobiidae	1	0.9	1	0.1
TOTAL	108	100	806	100

The ten families that had the largest number of species represented 94.5% of the diversity of spider species in the park (Table 1). The **Linyphiidae** were the most diverse family with 21.3% of the species, yet with a relatively small proportion (5.5%) of the collected specimens (Figures 3 and 4). Buddle (2001), in north-central Alberta, also found the highest species diversity in the Linyphiidae family but with a relatively high proportion (30%) of specimens in the catch. In the prairie ecozone of Alberta and Saskatchewan, Holmberg and Buckle (2002) found the Linyphiidae to be the most diverse family.

Figure 3. Relative percentages of the eight families of spiders with the most species in Colin-Cornwall Lakes Wildland Provincial Park.

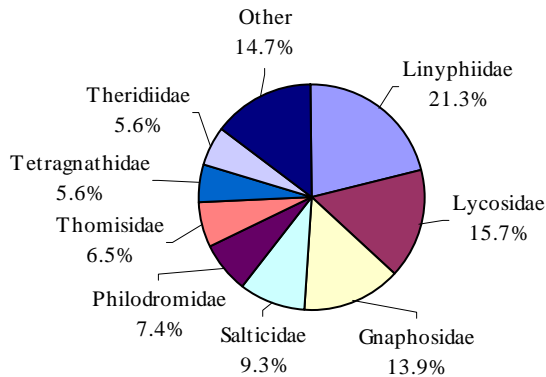
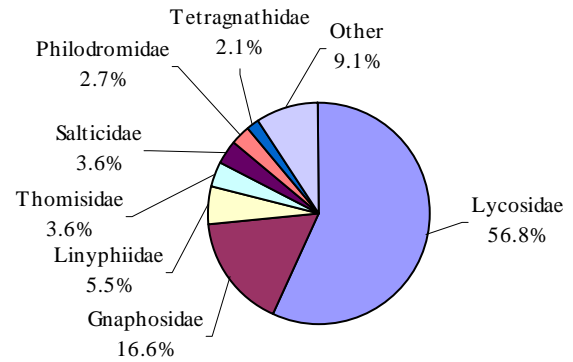


Figure 4. Relative percentages of the seven families of spiders with the most specimens in Colin-Cornwall Lakes Wildland Provincial Park.



The **Lycosidae** were the second most diverse family with 15.7% of the species (Figure 3) but with the highest proportion (56.8%) of collected specimens (Figure 4). The large number of specimens taken may be due to the relative ease with which lycosids are collected in pit and pan traps, as the spiders move around on the surface of the ground (Holmberg, pers. comm.). In his work in the north-central part of Alberta, Buddle (2001) also found that species in the Lycosidae family were numerically dominant, representing 44% of the total catch. The Lycosidae was one of the most diverse families and had the most specimens collected in other wildland parks in northeastern Alberta (Nordstrom and Buckle 2002). Aitchison and Sutherland (2000) found that the Lycosidae was the most commonly collected family in northern Manitoba and the family with the greatest species diversity.

The **Gnaphosidae** were the third most diverse family with 13.9% of the species (Figure 3) and with 16.6% of the specimens (Figure 4). This family was the second-most collected family in northern Manitoba (Aitchison and Sutherland, 2000); it was also quite diverse in species.

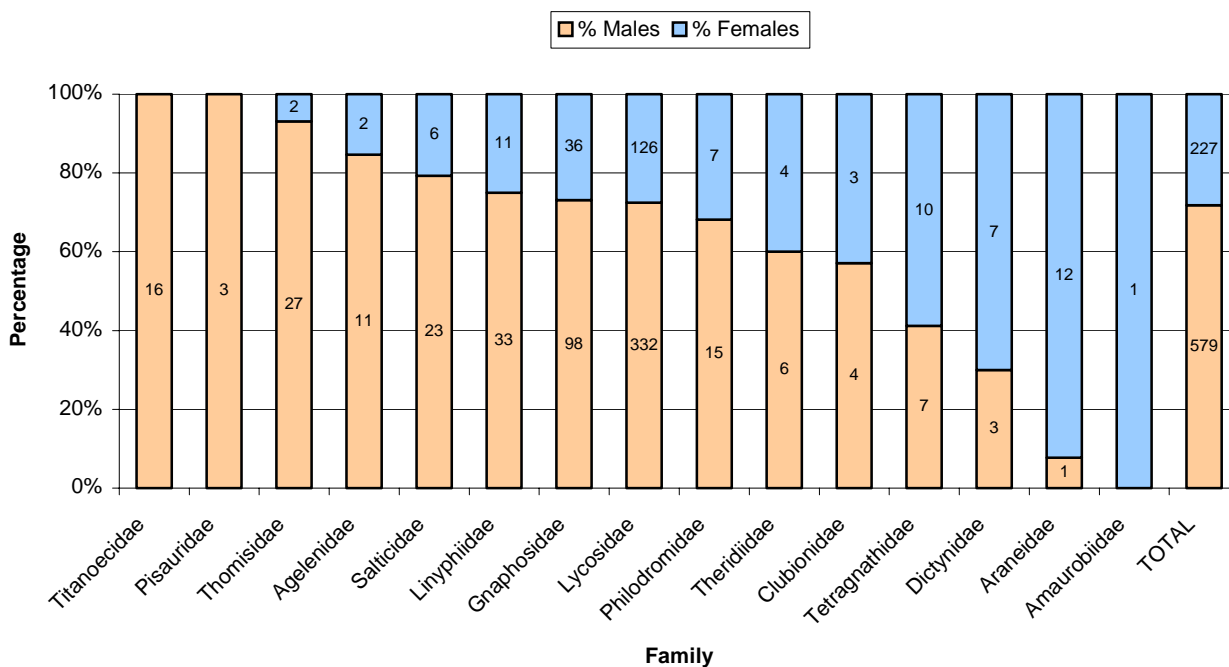
In bog habitats in northern Manitoba, Aitchison-Benell (1994) found that the dominant spider families were the Erigonidae (treated here as a subfamily of Linyphiidae), Lycosidae, Linyphiidae and Gnaphosidae.

The less commonly collected families in Colin-Cornwall Lakes Wildland Provincial Park were the Clubionidae, Pisauridae and Amaurobiidae (Table 1). In northern Manitoba, the less collected families included the Theridiidae, Amaurobiidae, Araneidae, Hahniidae and Liocranidae (Aitchison and Sutherland, 2000). Holmberg and Buckle (2002) noted that the Clubionidae ranked tenth in terms of overall species diversity in southern Alberta and Saskatchewan.

In total, 806 adult specimens (227 females, 579 males) were collected from the park (Table 1, Figure 5). Male specimens were dominant in the catch, comprising 72% (579/806) of all specimens that were collected. Male specimens were dominant in 11 of the 15 spider families recorded for the park (Figure 5); they were also dominant in the catch of individual species (Figure 6). The high proportion of males in the catch is to be expected considering that mature males tend to wander and are much more active than females during the reproductive period in June and July (Holmberg, pers. comm.). In the Manitoba taiga, Aitchison-Benell (1994) noted that when large numbers of male arachnids were collected, it usually indicated the reproductive period – when males are searching for females. Only in the Tetragnathidae, Dictynidae, Araneidae and Amaurobiidae families (all web-spinning spiders) were female specimens dominant in the catch (Figure 5). This may have been partially due to the females being much larger than the males in at least two of these families – the Araneidae and Tetragnathidae – and, therefore, were more easily seen and collected (Holmberg, pers. comm.).

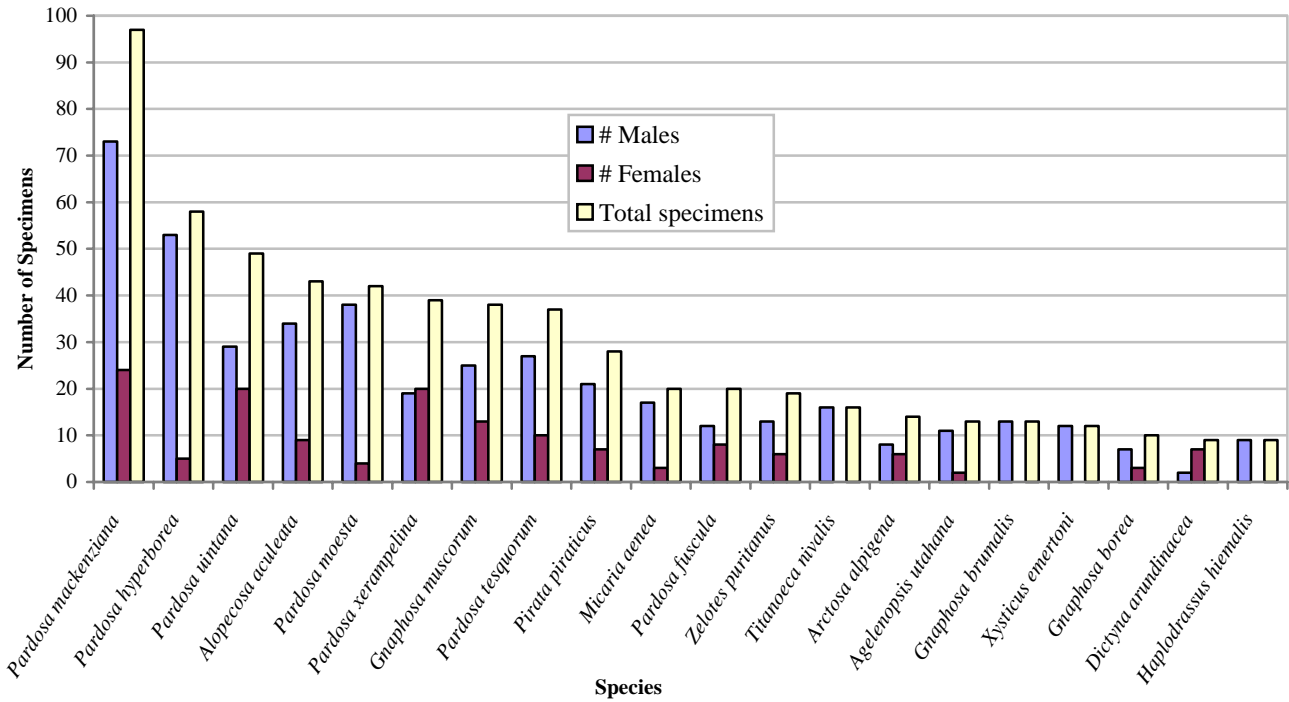
For the Titanoeidae, Pisauridae and Amaurobiidae families that were dominated exclusively by either male or female specimens in the catch, each family was represented by only a few specimens of one species (Table 1, Figure 5). For example, one female *Arctobius agelenoides* was collected within the Amaurobiidae family and three male *Dolomedes triton* were collected within the Pisauridae family.

Figure 5. Percentage of male and female spider specimens in each family that was collected from Colin-Cornwall Lakes Wildland Provincial Park. The actual number of specimens collected are shown within the bars.



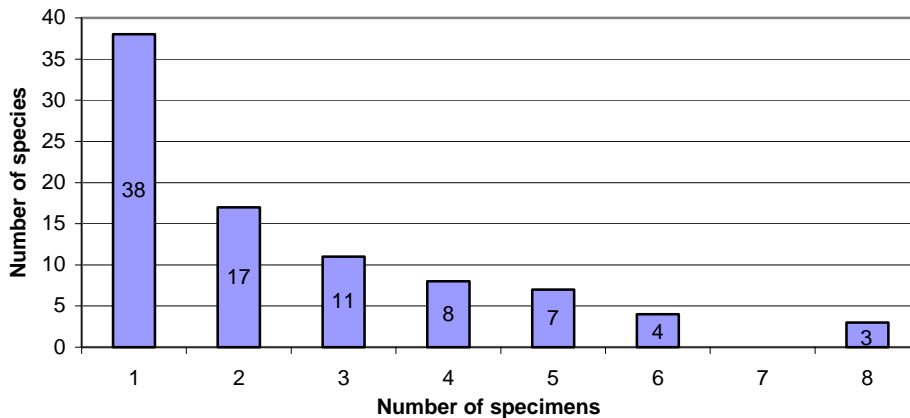
The five species most commonly collected were *Pardosa mackenziana* (97 specimens – 73 males, 24 females), *Pardosa hyperborea* (58 specimens – 53 males, 5 females), *Pardosa uintana* (49 specimens – 29 males, 20 females), *Alopecosa aculeata* (43 specimens – 34 males, 9 females) and *Pardosa moesta* (42 specimens – 38 males, 4 females) (Figure 6). In the taiga of northern Manitoba, Aitchison and Sutherland (2000) found *Pardosa mackenziana* to be one of the dominant ground-dwelling species. They also noted that other *Pardosa* species were dominant in the catches, a similar situation to what was found in this study (Figure 6).

Figure 6. Spider species for which nine or more specimens were collected.



As is often the case in collecting efforts, many species were represented by only a few specimens. About 81% (88/108) of the species noted for the park were represented by eight or fewer specimens and approximately 35% (38/108) were represented by only one specimen each (Figure 7). Approximately 27% (220/806) of all the specimens collected were from species for which fewer than eight specimens were collected (Table 1, Figure 7). Unfortunately, these results cannot be interpreted to estimate species' rarity, because sampling effort was not controlled either temporally or spatially. Buddle (2001) also noted that many of the spider species he collected were uncommon in the catch (e.g., about 31 of the 105 species he collected in pitfall traps – nearly 30% – were represented by only one individual).

Figure 7. Number of spider species for which eight or fewer specimens were collected.



The specimen records from Colin-Cornwall Lakes Wildland Provincial Park have contributed to what is known about the current distribution of a number of species. There were several notable finds, including the following:

Araniella proxima (Kulczynski 1885). An Holarctic northern species. Occurs in the Boreal and Hudsonian regions of North America from northern BC to NF. This rarely collected species was first recognized as a member of the North American fauna by Buckle & Roney (1995). One adult female was collected on 10 July 2002 in a pit trap near Colin Lake. This is the **first record** of this species for Alberta.

Clubiona praematura Emerton 1909. A low Arctic species also found on mountain tops in QC and northeastern USA. Also found in Siberia. One adult male was collected in early July 2002 on 'Trapper's Island' in Colin Lake. This species was **previously unknown** from either AB or SK.

Dictyna peragrata Bishop & Ruderman 1946. A western species extending from CA to AK. Occurs in the boreal as far east as SK. One adult male was collected in early June 2002 on the NE backshore of 'Esker Lake'. This represents a **new record** for Alberta.

Orodorassus canadensis Platnick & Shadab 1975. Western, from BC to CA and AZ, and east in the boreal to MB. One adult female was collected in a pit trap in early July 2002 in a bog area on the NE side of 'Esker Lake'. This record **extends the species' range** north by about 6° latitude.

Kaestneria rufula (Hackman 1954). Widespread across boreal North America, but rarely collected. One adult male was collected on 9 June 2002 on a south-facing sandy slope on the NE side of 'Esker Lake'. This represents a **first record** for Alberta.

Erigone atra Blackwall 1833. Holarctic in northern & temperate regions. Two adult females were collected, one in early June 2002 (pan trap, NE backshore of 'Esker Lake') and one in early July 2002 (pit trap, Colin Lake area). These represent a **first record** of this species for Alberta.

Erigone dentigera O.P.-Cambridge 1874. Northern and temperate regions of North America, except for the west coast where it is replaced by the closely related *E. capra*. One adult male was collected in early June 2002 on the NE backshore of 'Esker Lake'. This represents a **first record** of this species for Alberta.

Sisis sp. #1, nr. *rotundus*. *Sisis rotundus* (Emerton 1925) is a species of the Pacific northwest, with a range extending from WA to AK. East of the Rockies, from AB to QC, a closely related species occurs with genitalia identical or nearly identical to *rotundus*. The males, however, have a small cephalic pit, which is not present in *rotundus* proper, to the rear of the posterior lateral eye. Both forms have been treated as *rotundus* in the literature, including Buckle *et al.* (2001). Five adult males were collected, three in early June 2002 (NE backshore of 'Esker Lake') and two in early July 2002 (pit trap, beach ridge on NE side of 'Esker Lake'). These represent a **first record** of this species for Alberta.

Pirata canadensis Dondale & Redner 1980. A mainly boreal species occurring across Canada from BC to NS. Three adult males and one adult female were collected in early July 2002 on the NE backshore of 'Esker Lake'. This is the **northernmost record** of this species for AB.

Philodromus imbecillus Keyserling 1880. Widely distributed east of the Rockies. One adult male was collected in a pan trap in early July 2002 on the NE backshore of 'Esker Lake'. This is the **northernmost record** of this species for AB.

Thanatus coloradensis Keyserling 1880. A plains species found from southern BC to MB and south to OK and CA. There are also records from northern BC and AK (Dondale and Redner 1978) and YT (Dondale *et al.* 1997). Five adult males and one adult female were collected from pit traps in early July 2002 from the NE side of 'Esker Lake' (beach, ridge top). This species' occurrence in the Colin Lake area was **unexpected**.

Habronattus americanus (Keyserling 1885). Found on the Great Plains and intermontane valleys of the west, as well as open areas in the southern boreal and as far east as ON. Four adult males and one adult female were collected in early June (south-facing sandy slope on the NE side of 'Esker Lake') and early July (backshore on NE side of 'Esker Lake') of 2002. These are the **northernmost records** for the species, extending its range 5° or 6° northwards. It is unclear whether the Colin Lake specimens represent a disjunct population or whether *H. americanus* is widely distributed in open areas throughout the boreal.

Phidippus sp. #1. This species will be named *Phidippus cryptus* in G. B. Edwards's soon to be published revision of *Phidippus* (Edwards, in press). It has been found in AB, SK, MB, ON, MT, ND and MN (D. Richman, pers. comm.). It is a prairie and parkland species in AB and SK, and is also found in open areas in the southern boreal. Four adult males and two adult females were collected in early June and early July 2002 on backshore, sandy slope and ridge top areas on the NE side of 'Esker Lake'. These are the **northernmost records** of this species for Alberta.

Tetragnatha elongata Walckenaer 1841. Widespread. Not previously recorded beyond the southern boreal. One adult male was collected on 9 July 2002 on the NE backshore of 'Esker Lake'. This record **extends its range** northward by 6°. It is also the **first record** for Alberta.

Crustulina sticta (O. P.-Cambridge 1861). Widespread. One adult male and two adult females were collected in early June 2002. The adult females were collected on the north shore of Woodman Lake; the adult male from the NE backshore of 'Esker Lake'. These represent, surprisingly, a **first record** of this species for Alberta.

Xysticus sp. #1. The most interesting find in the park was a **new species of Xysticus** – allied to *chippewa* / *discursans* / *fervidus*. The new species is currently being described by Dr. C. D. Dondale, the North American expert on the genus. Three males and one female were collected in early June and one male in early July of 2002 on the NE side of 'Esker Lake'. The holotype and a paratype of the opposite sex will be retained in the Canadian National Collection in Ottawa.

Appendix 1 contains annotated notes for all of the spider species that were collected in the park. Further details on the species that were collected are shown in Appendix 2.

One of the biggest surprises from the spiders that were collected in the park was the presence of several 'plains species' in the catch. One would not expect to find a sizeable fauna of grassland spiders in the far northeastern part of Alberta. These results are similar to what Hamilton (1997, p.366) found with his work on the leafhoppers of the Yukon. He noted several leafhopper species in the fauna of the Yukon that are usually associated with prairie habitats.

To explain these results Hamilton (*ibid.*) postulates that,

“The presence of such a prairie-like faunal suite suggests an influx from some much warmer period than today. Such a period could not have been postglacial. Even during the postglacial period of maximum temperatures, the Hypsithermal, extensive grasslands apparently extended only a few degrees farther north than present prairie limits. To permit leafhoppers to disperse northward, such a grassland must have extended more or less continuously from the northern Great Plains into central Alaska via the Yukon. High-temperature regimes lasting longer than the 8000–15 000 years of known interstadial periods would have been needed to permit such a large-scale invasion of grassland species, many of which are short-winged and slow to disperse. Such temperature regimes could only have been interglacial or preglacial. If so, these northern grasslands must have existed continuously throughout the Wisconsinan glaciation.”

Not enough is known at present to say anything definitive about the presence of a prairie-like faunal suite of spiders in northeastern Alberta. It is intriguing to note that during the Hypsithermal – the postglacial period of maximum temperatures – a swath of prairie apparently extended north past the western half of Lake Athabasca (Figure 8, image 3). In preglacial times, that prairie included all of northeastern Alberta (Figure 8, image 4). Perhaps ‘plains species’ from those periods have persisted in northeastern Alberta, including Colin-Cornwall Lakes Wildland Provincial Park, until the present day.

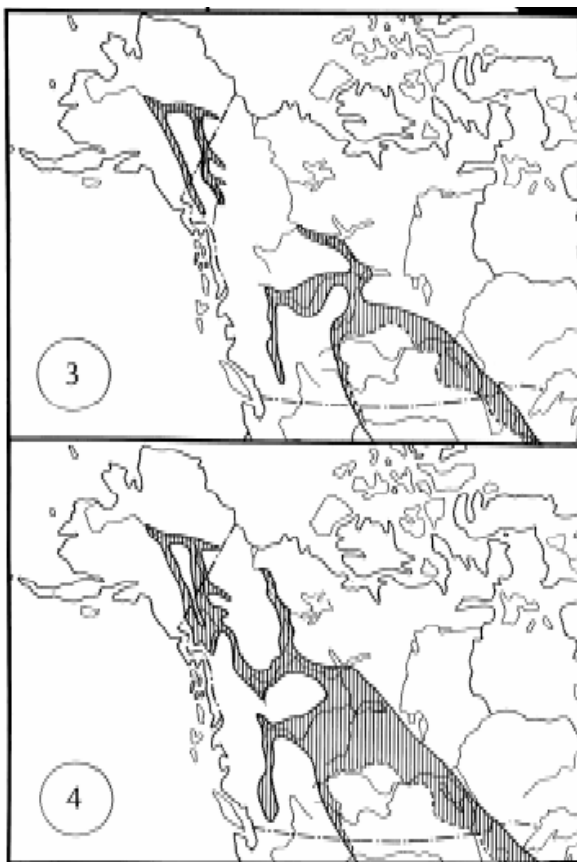


Figure 8. Inferred prehistorical environments in northern North America (from Hamilton 1977, p.367).

Image 3 indicates a reconstruction of the Hypsithermal extent of the northern Great Plains, ca. 7000 yr B.P., based on palynology and the distribution of some insect species. [The historical extent of the Great Plains is indicated by a dashed line, and the extent of prairie advance is indicated by the hatched area].

Image 4 indicates a reconstruction of the northern extent of preglacial grassland, based on prairie species in the Yukon, with prairie advance similarly indicated.

5. Conclusion

The spider specimens that were obtained in June and July of 2002 from Colin-Cornwall Lakes Wildland Provincial Park were valuable in a number of ways. They

- (a) improved our knowledge of species' ranges and phenologies in Alberta and Canada,
- (b) contributed to the discovery of new undescribed species, and
- (c) added to our understanding of the overall biodiversity of the park and the province.

Given the season in which the field program occurred (i.e., June, July) and the length of time spent at the park (15 days), many species, especially linyphiids, were likely missed. Better data would have been obtained if more extensive sampling had occurred over a broader time period and over more than one field season. This would allow more accurate conclusions to be drawn relative to the abundance and distribution of species in these areas.

6. Acknowledgements

Without the help and support of dedicated and enthusiastic people, this report would not have been possible. Thanks are due to Robert Holmberg who reviewed and provided helpful comments on the report and for his suggestions in terms of inventory procedures and methodology.

Thanks are also due to the Parks and Protected Area's staff of the Northeast Boreal Region, and in particular, Ted Johnson and Jennifer Gammon, for their work in making it possible to access sites and conduct field work in the wildland parks of northeastern Alberta. Without that logistic support, the inventory project would not have happened. Thanks also to the volunteers (e.g., Gerald Hilchie, Lorna Ash, Doug Macaulay) who were part of the field crew. They supplied specimens and provided support in the field.

The specimens will be housed in the E.H. Strickland Entomological Museum at the University of Alberta. We extend our appreciation to Felix Sperling and Danny Shpeley for their support in accepting and housing those specimens.

7. Personal Communications

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Appendix 1. Annotated notes for the spiders that were collected from Colin-Cornwall Lakes Wildland Provincial Park in 2002.

AGELENIDAE (1) (funnel web weavers)

This is a large family of mainly brownish-colored spiders, varying in length from 2 to 25 mm, and usually having long and conspicuously hairy legs (Preston-Mafham 1998). Called funnel-web spiders because of their flat sheets with a funnel-like tube opening at one side, these spiders capture flying or jumping insects that land on the sheet. The spiders run, in an upright position, over the dorsal side of these webs, seize their prey and retire with it to the funnel retreat (Dondale *et al.* 1997, Kaston 1978).

Agelenopsis utahana (Chamberlin & Ivie 1933). Widespread. Reaches its northern limits in AK, YT, and NT. Eleven males and two females were collected from the 'Esker Lake' area.



Agelenopsis utahana
Photo by D. Buckle

AMAUROBIIDAE (1) (hackledmesh weavers)

This family contains mainly brown or black spiders with a superficial resemblance to the funnel-weavers in the family Agelenidae. However, the clearly visible cribellum at the tip of the amaurobiid abdomen produces hackled-band silk and serves easily to distinguish the two groups (Preston-Mafham 1998). The amaurobiids are sedentary web builders. They live in moist dark places such as crevices beneath stones, rock fissures, logs, dead leaves or loose bark (Dondale *et al.* 1997, Kaston 1978).

Arctobius agelenoides (Emerton 1919). Holarctic, northern. In north America a Boreal/Hudsonian species extending as far east as MB. One female was collected from the 'Esker Lake' area.

ARANEIDAE (5) (orb weavers)

The araneids, together with the tetragnathids, uloborids and titanocids, comprise the orb-weaving spiders. They have tiny eyes. The sense of touch of these spiders is acute and they are able to monitor their webs through their vibration-sensitive legs and feet (Preston-Mafham 1998). Their typical two-dimensional wheel-shaped webs of sticky silk are common sights. In the boreal zone most species are inhabitants of trees and shrubs. In many species there is considerable sexual dimorphism, with the males often being much smaller and not seen as frequently as the females (Dondale *et al.* 1997, Holmberg, pers. comm., Kaston 1978).

Araneus iviei (Archer 1951). A northern species occurring across Canada and in the northeastern USA. One male was collected from the 'Esker Lake' area in an old growth forest.



Araneus iviei
Photo by D. Buckle

Araniella proxima (Kulczynski 1885). An Holarctic northern species. Occurs in Boreal and Hudsonian regions of North America from northern BC to NF. This rarely collected species was first recognized as a member of the North American fauna by Buckle & Roney (1995). It has not been previously recorded from Alberta. One female was collected from the Colin Lake area.

Hypsosinga pygmaea (Sundevall 1831). Holarctic. Widespread. One female was collected on the north shore of Woodman Lake.

Larinioides cornutus (Clerck 1757). Holarctic. Widespread. Four females were collected – one on a SE-facing rock slope on Woodman Lake, two on the north shore of Woodman Lake and one on the NE backshore of ‘Esker Lake’.



Larinioides cornutus

Photo by D. Buckle

Larinioides patagiatus (Clerck 1757). Holarctic. Widespread. Six females were collected – five from the ‘Esker Lake’ area and one from the Woodman Lake area.

CLUBIONIDAE (5) (sac spiders)

The clubionids or sac spiders are mainly brown or tawny in color. They are active hunters and do not build prey-catching webs. They forage by night and spend the daylight hours in a flattened tubular retreat constructed of silk, hence the term ‘sac’. The sac is built under loose bark, in a rolled leaf or beneath a stone or log. Many species are superb mimics of ants (Preston-Mafham 1998). The spiders are swift runners and are commonly encountered on foliage or on the ground. There is little difference between the sexes though the males are slightly smaller. These spiders can reach lengths of up to 10 mm (Dondale *et al.* 1997, Dondale and Redner 1982, Kaston 1978).

Clubiona canadensis Emerton 1890. Widely distributed east of the Rockies. One male and one female were collected from the ‘Esker Lake’ area.

Clubiona furcata Emerton 1919. A mainly boreal species found across Canada and south to Utah in the Rockies. One male was collected from the ‘Esker Lake’ area.

Clubiona kulczynskii Lessert 1905. An Holarctic woodland species widely distributed across Canada and the northern USA. One male was collected from the ‘Esker Lake’ area.

Clubiona praematura Emerton 1909. A low Arctic species. Also found on mountain tops in QC and northeastern USA. Occurs in Siberia. It has not previously been recorded from either AB or SK. One male was collected from ‘Trapper’s Island’ on Colin Lake.

Clubiona riparia L. Koch 1866. A water-side species found across Canada and in northern and montane areas of the USA. Two females were collected – one in the ‘Esker Lake’ area and one on the west side of Colin Lake.



Clubiona riparia

Photo by D. Buckle

DICTYNIDAE (2) (meshweb weavers)

This is the largest family of cribellate spiders. Most species are quite small – 5 mm long or less (Kaston 1978, Preston-Mafham 1998). Most dictynids use sticky silk emitted from a flat spinning plate called the cribellum in web construction. Their small, rather haphazard webs are often built at the tips of weeds or twigs, or among stones and plant debris on the ground (Dondale *et al.* 1997).

Dictyna arundinacea (Linnaeus 1758). Holarctic. Northern and montane. In 2000, this species was collected in the Richardson River area and from Marguerite River Wildland Provincial Park (Nordstrom and Buckle 2002). In 2002, two males and seven females were collected from the Colin Lake and ‘Esker Lake’ areas.

Dictyna peragrata Bishop & Ruderman 1946. A western species extending from CA to AK. Occurs in the boreal as far east as SK. A new record for Alberta. One male was collected from the ‘Esker Lake’ area.

GNAPHOSIDAE (15) (stone spiders, ground spiders)

Most gnaphosids spend their day under logs, plant debris or stones, hence their common name. They often build a tubular retreat from which they emerge at night to hunt and mate. Their eight eyes are very small, befitting spiders that are mainly nocturnal hunters relying on touch and smell, rather than sight, to locate prey (Preston-Mafham 1998). Their body is usually uniformly dark in colour and many species appear superficially alike (Dondale *et al.* 1997).

Callilepis pluto Banks 1896. Widespread. One male was collected from the ‘Esker Lake’ area.

Drassodes neglectus (Keyserling 1887). Widespread in North America. Also occurs in eastern Palaearctic. Eight males were collected in the ‘Esker Lake’ area from old growth forest, ridge top and beach habitats.

Gnaphosa borea Kulczynski 1908. A northern species occurring across Canada and in northeastern USA. South in Rockies to NM. Also found in Siberia. Seven males and three females were collected in the ‘Esker Lake’ area from bog, ridge top and beach habitats.

Gnaphosa brumalis Thorell 1875. Widespread. Thirteen males were collected in the ‘Esker Lake’ area from bog, old growth forest, ridge top and beach habitats.

Gnaphosa microps Holm 1939. A Holarctic northern species. Two females were collected – one from the ‘Esker Lake’ area and one from ‘Trapper’s Island’ on Colin Lake.

Gnaphosa muscorum (L. Koch 1866). Widespread. Twenty-five males and thirteen females were collected from a variety of habitats in the ‘Esker Lake’ and Colin Lake areas.

Gnaphosa parvula Banks 1896. Northern and central North America. One male was collected from the east side of ‘Esker Lake’.

Haplodrassus hiemalis (Emerton 1909). Holarctic. Widespread. Nine males were collected from the ‘Esker Lake’ area in a variety of habitats.

Haplodrassus signifer (C.L. Koch 1839). Holarctic. Northern. One male was collected from the ‘Esker Lake’ area.

Micaria aenea Thorell 1871. Holarctic. Northern. Seventeen males and three females were collected from the ‘Esker Lake’ area in a variety of habitats.

Micaria rossica Thorell 1875. Holarctic. Occurs from AK south to CA and NM, and east to MB. One male and two females were collected in the ‘Esker Lake’ and Colin Lake areas.

Orodassus canadensis Platnick & Shadab 1975. Western, from BC to CA and AZ, and east in boreal to MB. This record extends the species’ range north by about 6° latitude. One female was collected in the ‘Esker Lake’ area in bog habitat.

Sergiolus montanus (Emerton 1890). Widespread. Two males and two females were collected in the 'Esger Lake' area in ridge top habitats.

Zelotes fratris Chamberlin 1920. Widespread. Four females were collected in the 'Esger Lake' area.

Zelotes puritanus Chamberlin 1922. Holarctic. Widespread. Thirteen males and six females were collected in the 'Esger Lake' and Colin Lake areas in a variety of habitats.

LINYPHIIDAE (LINYPHIINAE) (9) (sheetweb weavers)

Most of the spiders of this family weave a sheet-like web with a mesh of sticky threads above it. The spider hangs under the web, waiting for its prey. Flying and jumping insects hit the sticky strands and fall onto the web where they are caught. Most of the linyphiids live in litter or moss, though three of the Boreal species build webs among the branches of coniferous trees (Dondale *et al.* 1997).

Agyneta olivacea (Emerton 1882). Palaearctic. Northern. Two females were collected – one from the 'Esger Lake' area and one from 'Trapper's Island' in Colin Lake.

Bathypantes pallidus (Banks 1892). Widespread. Three males were collected – two from the 'Esger Lake' area and one from 'Trapper's Island' in Colin Lake.

Kaestneria rufula (Hackman 1954). Widespread across boreal North America, but rarely collected. A first record for Alberta. One male was collected from a south-facing sandy slope in the 'Esger Lake' area.

Lepthyphantes alpinus (Emerton 1882). Northern North America and adjacent Siberia. One male was collected from the 'Esger Lake' area using carrion bait in a pit trap.

Microneta viaria (Blackwall 1841). Holarctic. Widespread. One male was collected from the 'Esger Lake' area.

Neriene clathrata (Sundevall 1829). Holarctic. Temperate and northern North America. One female was collected from the 'Esger Lake' area.

Neriene radiata (Walckenaer 1841). Holarctic. Widespread. One male was collected from the 'Esger Lake' area.

Oreonetides vaginatus (Thorell 1872). Holarctic. Northern, montane. Three males were collected from the 'Esger Lake' area.

Pityohyphantes subarcticus (Chamberlin & Ivie 1943). Boreal. Webs on conifers. Five males and one female were collected from the 'Esger Lake' and Colin Lake areas.

LINYPHIIDAE (ERIGONINAE) (14) (dwarf weavers)

This is a large family of mostly very small spiders – sometimes referred to as dwarf spiders. They rarely exceed 2 mm in body length. They are more common in the cooler parts of the world than in the tropics. Their populations often reach very high numbers in suitable habitats (Preston-Mafham 1998). The majority are litter dwellers that feed on springtails and similar prey (Dondale *et al.* 1997).

Ceratinopsis stativa (Simon 1881). Doubtfully transferred to *Styloctetor* by Marusik & Tanasevitch (1998) and listed in that genus by Buckle *et al.* (2001). Holarctic, northern. One male was collected from the 'Esger Lake' area.

Cnephalocotes obscurus (Blackwall 1834). Holarctic, northern. Two males were collected from the 'Esger Lake' area.

Erigone atra Blackwall 1833. Holarctic in northern & temperate regions. Not previously recorded for Alberta. Two females were collected – one from the Colin Lake area and one from the 'Esger Lake' area.

Erigone dentigera O.P.-Cambridge 1874. Northern and temperate regions of North America, except for the west coast where it is replaced by the closely related *E. capra*. Not previously recorded for Alberta. One male was collected from the 'Esger Lake' area.

Glyphesis scopulifer (Emerton 1882). Northern. One female was collected from the 'Esger Lake' area.

Gonatium crassipalpus Bryant 1933. Widely distributed over northern and temperate North America. One female was collected from the Colin Lake area.

Grammonota gigas (Banks 1896). Northern North America. Two males were collected from 'Trapper's Island on Colin Lake.

Hilaira herniosa (Thorell 1875). Palaearctic, northern. One female was collected from the 'Esger Lake' area.

Satilatlas sp. *Satilatlas* is a North American genus containing seven species, most of them poorly known and difficult to distinguish. This specimen was dried and is in poor condition. One male was collected from the 'Esger Lake' area.

Sciastes truncatus (Emerton 1882). Northern distribution from AK to NF. Two males were collected from the 'Esger Lake' area.

Sisis sp. #1, nr. *rotundus*. *Sisis rotundus* (Emerton 1925) is a species of the Pacific northwest, with a range extending from WA to AK. East of the Rockies, from AB to QC, a closely related species occurs with genitalia identical or nearly identical to *rotundus*. The males, however, have a small cephalic pit, which is not present in *rotundus* proper, to the rear of the posterior lateral eye. Both forms have been treated as *rotundus* in the literature, including Buckle *et al.* (2001). Not previously recorded from Alberta. Five males were collected from the 'Esger Lake' area.

Walckenaeria communis (Emerton 1882). Widely distributed in North America and extending as far north as AK, YT, NT. One female was collected from the 'Esger Lake' area.

Walckenaeria karpinskii (O.P.-Cambridge 1873). Holarctic, northern. Three males and one female were collected from the 'Esger Lake' area.

Walckenaeria tricornis (Emerton 1882). Northern North America. One male was collected from the 'Esger Lake' area.

LYCOSIDAE (17) (wolf spiders)

The lycosids, or wolf spiders, are mainly dark-bodied, strong-legged hunters that live on the ground. Many do not have any kind of permanent home. They have fairly sensitive vision that is aided by two large eyes in the centre of the face, flanked by two smaller eyes. A further row of four small eyes lies beneath them (Preston-Mafham 1998). They either "sit and wait" for moving prey or they simply run it down. The females carry their egg sacs about on the spinnerets until hatching time, after which they carry the young on their backs for a time (Dondale *et al.* 1997).

Alopecosa aculeata (Clerck 1757). Holarctic. Temperate and northern. Thirty-four males and nine females were collected from the 'Esger Lake' and Woodman Lake areas in a variety of habitats.

Arctosa alpigena (Doleschall 1852). Holarctic. Arctic, alpine, boreal. Eight males and six females were collected from the 'Esger Lake' area in a variety of habitats.

Arctosa raptor (Kulczynski 1885). Siberia and northern North America. Boreal to low arctic. Three males were collected from the 'Esger Lake' area.

Hogna frondicola (Emerton 1885). Widely distributed: northern boreal to southern USA. Eight females were collected from the 'Esger Lake' area.

Pardosa concinna (Thorell 1877). Open habitats, from low Arctic to northern Great Plains. Four males and one female were collected from the Colin Lake area.

Pardosa fuscula (Thorell 1875). Holarctic: low Arctic to northern and alpine USA. Twelve males and eight females were collected from the 'Esker Lake' and Colin Lake areas.

Pardosa hyperborea (Thorell 1872). Holarctic: low Arctic to boreal. Fifty-three males and five females were collected from the 'Esker Lake' and Colin Lake areas.

Pardosa mackenziana (Keyserling 1877). Low Arctic to northern and western montane USA. Seventy-three males and 24 females were collected from from the 'Esker Lake' and Colin Lake areas.

Pardosa moesta Banks 1892. Northern boreal to mid-USA. Thirty-eight males and four females were collected from the 'Esker Lake' and Colin Lake areas.

Pardosa tesquorum (Odenwall 1901). Holarctic: low Arctic to northern USA. Twenty-seven males and ten females were collected from the 'Esker Lake' area.



Pardosa tesquorum
Photo by D. Buckle

Pardosa uintana Gertsch 1933. Northern and montane, south to UT. Twenty-nine males and twenty females were collected from the 'Esker Lake' and Colin Lake areas in a variety of habitats.

Pardosa xerampelina (Keyserling 1877). Widely distributed: northern boreal to southern USA. Nineteen males and twenty females were collected from the 'Esker Lake' area in a variety of habitats.

Pirata bryantae Kurata 1944. A northern species occurring from AK to NF. Two males were collected – one from the 'Esker Lake' area and one from 'Trapper's Island' on Colin Lake.

Pirata canadensis Dondale & Redner 1981. A mainly boreal species occurring across Canada from BC to NS. Colin Lake is the northernmost record for this species. Three males and one female were collected from the 'Esker Lake' area.

Pirata insularis Emerton 1885. Widely distributed. Two males and three females were collected from the 'Esker Lake' and Colin Lake areas.

Pirata piraticus (Clerck 1757). Holarctic: low Arctic to southern USA. Twenty-one males and seven females were collected from the 'Esker Lake' and Colin Lake areas.

Trochosa pratensis Emerton 1885. Northern boreal to southern USA. Considered by some to be a synonym of the palaeartic *Trochosa terricola* Thorell. Four males were collected from the 'Esker Lake' area.

PHILODROMIDAE (8) (philodromid crab spiders)

The spiders in this and the Thomisidae are crablike in both shape and movement, walking forward, sideways or backward, with equal facility. They have flattened bodies and long legs. The males are much smaller than the females but have much longer legs in proportion to their bodies (Preston-Mafham 1998). The philodromids live mainly on the foliage of trees and shrubs or on the slippery surfaces of stones. Lithe and swift, they are "sit and wait" predators waiting in ambush on flowers, leaves, bark, rocks or soil. They do not build prey-catching webs. In retreat they instantly shuffle into crevices, hidden from sight. They are believed to feed mainly on springtails and small flies. These spiders can reach lengths of up to 8 mm (Dondale *et al.* 1997, Dondale and Redner 1978).

Philodromus cespitum (Walckenaer 1802). Holarctic, Boreal. Widespread. From AK to NF, south to CA, IL and NJ. One male was collected in the 'Esker Lake' area from a UV trap designed for collecting moths and two females were collected from the Woodman Lake area.

Philodromus imbecillus Keyserling 1880. Widely distributed east of the Rockies. Colin Lake is its northernmost record. One male was collected from the 'Esker Lake' area.

Philodromus mysticus Dondale & Redner 1975. Widely distributed in the boreal from BC to NF, but rarely collected. One male and one female were collected from the 'Esker Lake' area.

Philodromus placidus Banks 1892. Widespread from the northern boreal south to Mexico. Occurs on conifer foliage. Two males were collected from the 'Esker Lake' area.

Philodromus rufus Walckenaer 1826. Holarctic. Widely distributed. One male and two females were collected from the 'Esker Lake' area.

Thanatus coloradensis Keyserling 1880. A plains species found from southern BC to MB and south to OK and CA. There are also records from northern BC and AK (Dondale and Redner 1978) and YT (Dondale *et al.* 1997). The two female specimens from Lake Athabasca and La Butte Creek identified as *Thanatus formicinus* in Nordstrom and Buckle (2002) should probably be referred to this species. The occurrence of *Thanatus coloradensis* at Colin Lake was unexpected. Five males and one female were collected from the 'Esker Lake' area.



Thanatus coloradensis
Photo by D. Buckle

Tibellus maritimus (Menge 1875). Holarctic. Widely distributed. Three males and one female were collected from the 'Esker Lake', Woodman Creek and Colin Lake areas.

Tibellus oblongus (Walckenaer 1802). Holarctic. Widely distributed. One male was collected from the 'Esker Lake' area.

PISAURIDAE (1) (nurseryweb spiders)

Pisaurids are similar to wolf spiders but the eyes are more or less all the same size. The female also carries her egg-sac, as in wolf spiders but holds it beneath the front of her body, suspended from her fangs and pedipalps (Preston-Mafham 1998). Pisaurids are called nurseryweb spiders because of the tent-like silken nursery in which the female suspends the egg sac as hatching approaches. The female "stands guard" on the outside of the nursery. Young spiders disperse into a solitary hunting mode of life. The prey are hunted as in the Lycosidae – either "sitting and waiting" for moving prey or simply running it down. Their preferred habitats are the margins of lakes or ponds, and these spiders can hunt under water (Dondale *et al.* 1997).

Dolomedes triton (Walckenaer 1837). Widespread. Three males were collected from the 'Esker Lake' area.



Dolomedes triton
Photo by R. Holmberg

SALTICIDAE (10) (jumping spiders)

These are the jumping spiders – they do not rely on webs to capture prey. Many of the males have an iridescent, jewel-like color, and often look quite different from the much drabber females. The most obvious character of the salticids is a pair of disproportionately large eyes. They have eight eyes; the two large ones face forward and can be focused very accurately from as far away as 50 cm. The other eyes are smaller, and help to detect movement and fix the prey's position (Preston-Mafham 1998). With keen binocular vision and great agility they roam in full daylight over plants and stones, detect their prey by sight, and, cat-like, spring upon it. These spiders can leap up to 30 times their own length. Before leaping they fasten a safety thread to the substrate and are thus able to regain their position, even on vertical walls, after taking to the air (Buddle and Shorthouse 2000, Dondale *et al.* 1997).

Eris militaris (Hentz 1835). Widespread. Found on shrubs and trees. Seven males and one female were collected from the 'Esker Lake' and Colin Lake areas.



Eris militaris (male)
Photo by D. Buckle

Evarcha prozyskii Marusik & Logunov 1997. Holarctic. Western Canada and Siberia. Two males were collected from the 'Esker Lake' and Colin Lake areas.

Habronattus americanus (Keyserling 1884). Found on the Great Plains and intermontane valleys of the west, as well as open areas in the southern boreal and as far east as ON. This is a northernmost record for the species, extending its range 5 or 6° north. It is unclear whether the Colin Lake specimens represent a disjunct population or whether *H. americana* is widely distributed in open areas throughout the boreal. Four males and one female were collected from the 'Esker Lake' and Colin Lake areas.

Habronattus captiosus (Gertsch 1934). What is known of this species' distribution is peculiar. It has previously been reported from the American Midwest (MI, MN), and from the foothills and front ranges of the Rockies from southwestern Alberta to the southern Yukon. It was collected in 2000 from the Richardson River area in AB and in 2001 from the north shore of Lake Athabasca (Nordstrom and Buckle 2002). Four males and one female were collected from the 'Esker Lake' and Colin Lake areas in 2002.

Pelegrina montana (Emerton 1891). A northern/montane species found from AK and UT south to NM and east to NF and northeastern USA. Found on deciduous shrubs and trees. Two females were collected from the 'Esker Lake' area – one in a Malaise trap designed for collecting moths.

Pellenes ignifrons (Grube 1861). Holarctic. Northern/montane. One male was collected from the 'Esker Lake' area.

Pellenes lapponicus (Sundevall 1833). Holarctic. Northern/montane. One male was collected from the 'Esker Lake' area.

Phidippus sp. #1. This species will be named *Phidippus cryptus* in G. B. Edwards' soon to be published revision of *Phidippus* (Edwards, in press). It has been found in AB, SK, MB, ON, MT, ND and MN (D. Richman, pers. comm.). It is a prairie and parkland species in AB and SK, and is also found in open areas in the southern boreal. Don Buckle's northernmost records are from Athabasca, AB (grain field) and Anglin Lake, SK (dry, grass-covered hillside above lake).

Four males and two females were collected from the 'Esker Lake' and Colin Lake areas – on ridge tops, open backshore areas and south-facing sandy slopes.



Phidippus sp.
Photo by C. Buddle

Sitticus finschii (L.Koch 1879). Holarctic. Northern. One male was collected from the 'Esker Lake' area.

Sitticus ranieri Peckham & Peckham 1909. Holarctic. Northern/montane. One male was collected from the 'Esker Lake' area.

TETRAGNATHIDAE (6) (long-jawed orb weavers)

The tetragnathids are long-bodied, long-legged spiders which, like the araneids, build orb webs. The webs constructed by these spiders are seldom vertical but are usually inclined at an angle and are sometimes horizontal (Preston-Mafham 1998). The webs are complete orbs with open hubs, and have relatively few radii and few spirals. Most build in tall grass or in shrubs near water, and their prey is often the flying stage of aquatic insects (Dondale *et al.* 1997, Kaston 1978).

Pachygnatha clercki Sundevall 1823. Holarctic. One female was collected from 'Trapper's Island' on Colin Lake.



Pachygnatha clercki
Photo by D. Buckle

Tetragnatha dearmata Thorell 1873. Holarctic. Boreal. One male was collected from the 'Esker Lake' area in a UV light designed to collect moths.

Tetragnatha elongata Walckenaer 1842. Widespread. Not previously recorded beyond the southern boreal. This record extends its range northward by 6°. First record for Alberta. One male was collected from the 'Esker Lake' area in backshore forested habitat.

Tetragnatha extensa (Linnaeus 1758). Holarctic. Boreal/Hudsonian. Two males and three females were collected from the west side of Colin Lake.

Tetragnatha versicolor Walckenaer 1842. Widespread. On shrubs and trees. Three males and one female were collected from the 'Esker Lake' and Colin Lake areas.

Tetragnatha sp. Five females were collected in the 'Esker Lake', Woodman Creek and Colin Lake areas.

THERIDIIDAE (6) (comb-footed spiders)

These are the comb-footed spiders, so called because the hind tarsi are fitted with a row of stiff serrated setae by means of which the spider can fling, from a safe distance, loops of sticky silk over a struggling prey; in this way they can subdue even large fierce beetles or wasps. The web is an irregular

tangle placed in shrubs and trees or in litter and among stones. They often suspend themselves from their snares in an inverted position while awaiting their prey (Dondale *et al.* 1997, Kaston 1978).

Crustulina sticta (O.P.-Cambridge 1861). Widespread. It appears, surprisingly, that there is no previous record of this species in Alberta. One male was collected from the 'Esker Lake' area and two females from the north shore of Woodman Lake.

Euryopsis argentea Emerton 1882. Northern North America and eastern Siberia. One male was collected from the 'Esker Lake' area.



Euryopsis argentea (female)
Photo by Cravens

Robertus fuscus (Emerton 1894). Northern/montane. One male was collected from the 'Esker Lake' area.

Steatoda albomaculata (DeGeer 1778). Holarctic. Widespread. One male and one female were collected from the Colin Lake area.

Steatoda borealis (Hentz 1850). Widespread east of the Rockies. Two males were collected from the 'Esker Lake' area – one in old growth forest habitat.

Theridion differens Emerton 1882. Widespread. One female was collected from the west side of Colin Lake.

THOMISIDAE (7) (thomisid crab spiders)

The spiders in this and the Philodromidae are crablike in both shape and movement, walking forward, sideways or backward, with equal facility (Preston-Mafham 1998). The thomisids are mainly dark-bodied, rather flat hunting spiders. These spiders are wanderers and secure their prey by stealth; some ambush pollinating insects. They do not weave snares or retreats. They have long strong front legs with which they grapple and hold prey while they feed. Most species are inhabitants of ground litter in grasslands and forests. Thomisids can reach lengths of up to 11 mm (Dondale and Redner 1978, Dondale *et al.* 1997, Kaston 1978).

Ozyptila sincera canadensis Dondale & Redner 1975. Boreal. Three males were collected from the 'Esker Lake' area.

Xysticus britcheri Gertsch 1934. Northern. Two males were collected from the 'Esker Lake' area and one from 'Trapper's Island' on Colin Lake.

Xysticus chippewa Gertsch 1953. Holarctic. Northern. One female was collected from the Woodman Creek area.

Xysticus emertoni Keyserling 1880. Widespread. Twelve males were collected from the 'Esker Lake' area.



Xysticus emertoni
Photo by D. Buckle

Xysticus luctuosus (Blackwall 1836). Holarctic. Northern. Three males were collected from the 'Eske Lake' area – two from old growth forest habitat.

Xysticus obscurus Collett 1877. Holarctic. Northern. Two males were collected from the 'Eske Lake' area.

Xysticus sp. #1. This species is currently being described as a species new to North America. It is closely related to *Xysticus discursans*. Four males and one female were collected from the 'Eske Lake' area.

TITANOECIDAE (1) (titanoecid spiders)

The titanoecids are a cribellate group of spiders (i.e., have a distinctive organ for silk production), like the amaurobiids with which they were formerly associated. They have habits that are similar to the amaurobiids. The titanoecids usually build their open-meshed webs among the leaf litter on the forest floor (Hancock and Hancock 2003). This family is represented in Canada by only four species.

Titanoeca silvicola Chamberlin & Ivie 1947. Holarctic. Northern. While Marusik (1995) recently synonymized *T. silvicola* with *Titanoeca nivalis* Simon 1874, Leech (1972) considered *Titanoeca silvicola* Chamberlin & Ivie 1947 to be a Holarctic species distinct from but closely related to the exclusively Palaearctic *Titanoeca nivalis*. Don Buckle has not yet reviewed the problem and is provisionally following Leech's usage here. Ten males were collected from the 'Eske Lake' area in a variety of habitats.

Appendix 2. Spiders collected from Colin-Cornwall Lakes Wildland Provincial Park in 2002.

Vial #	Family	Species	# Males	# Females	Total specimens	Location	Habitat / Collection technique	Date	Collector
9	Agelenidae	<i>Agelenopsis utahana</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Old growth	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
14	Agelenidae	<i>Agelenopsis utahana</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	6-8 Jul 2007	G.J. Hiltchie, D.N. Hiltchie, L. Ash
15	Agelenidae	<i>Agelenopsis utahana</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
19	Agelenidae	<i>Agelenopsis utahana</i>	2	1	3	Colin Lake area, "Esker Lake"	Pit traps. Beach ridge	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
20	Agelenidae	<i>Agelenopsis utahana</i>	2		2	Colin Lake area, "Esker Lake"	Pan traps. Duncan's dunk	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
24	Agelenidae	<i>Agelenopsis utahana</i>	1		1	Colin Lake area, "Esker Lake"	South end of lake. Pit traps	8-9 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
36	Agelenidae	<i>Agelenopsis utahana</i>	4		4	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
36	Amaurobiidae	<i>Arctobius agelenoides</i>		1	1	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
9	Araneidae	<i>Araneus iviei</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Old growth	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
21	Araneidae	<i>Araniella proxima</i>		1	1	Colin Lake	Pit traps	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
44	Araneidae	<i>Hypsosinga pygmaea</i>		1	1	Woodman Lake	North shore	10 Jun 2002	Ted Johnson
39	Araneidae	<i>Larinioides cornutus</i>		1	1	Woodman Lake	At outlet to creek. SE facing rock slope. Burned.	11 Jun 2002	Ted Johnson
44	Araneidae	<i>Larinioides cornutus</i>		2	2	Woodman Lake	North shore	10 Jun 2002	Ted Johnson
47	Araneidae	<i>Larinioides cornutus</i>		1	1	Colin Lake area, "Esker Lake"		9 Jul 2002	Wayne Nordstrom
8	Araneidae	<i>Larinioides patagiatus</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Beach	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
24	Araneidae	<i>Larinioides patagiatus</i>		1	1	Colin Lake area, "Esker Lake"	South end of lake. Pit traps	8-9 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
29	Araneidae	<i>Larinioides patagiatus</i>		1	1	Colin Lake area, "Esker Lake"	West end	8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
35	Araneidae	<i>Larinioides patagiatus</i>		1	1	Colin Lake area, "Esker Lake"	Base camp	11 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
39	Araneidae	<i>Larinioides patagiatus</i>		1	1	Woodman Lake	At outlet to creek. SE facing rock slope. Burned.	11 Jun 2002	Ted Johnson
46	Araneidae	<i>Larinioides patagiatus</i>		1	1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
9	Clubionidae	<i>Clubiona canadensis</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Old growth	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
47	Clubionidae	<i>Clubiona canadensis</i>		1	1	Colin Lake area, "Esker Lake"		9 Jul 2002	Wayne Nordstrom
46	Clubionidae	<i>Clubiona furcata</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
36	Clubionidae	<i>Clubiona kulczynskii</i>	1		1	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
45	Clubionidae	<i>Clubiona praematura</i>	1		1	Colin Lake, Trapper's Island		6-9 Jul 2002	Ted Johnson
10	Clubionidae	<i>Clubiona riparia</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. 3	9 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
42	Clubionidae	<i>Clubiona riparia</i>		1	1	Colin Lake	West end	11 Jun 2002	Ted Johnson
41	Dictynidae	<i>Dictyna arundinacea</i>	1	7	8	Colin Lake	West end	8 Jul 2002	Ted Johnson
46	Dictynidae	<i>Dictyna arundinacea</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
46	Dictynidae	<i>Dictyna peragrata</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
18	Gnaphosidae	<i>Callilepis pluto</i>	1		1	Colin Lake area, "Esker Lake"	Pit traps. Ridge top	7-9 Jul 2007	G.J. Hiltchie, D.N. Hiltchie, L. Ash
9	Gnaphosidae	<i>Drassodes neglectus</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Old growth	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
11	Gnaphosidae	<i>Drassodes neglectus</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top. 4	6 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
15	Gnaphosidae	<i>Drassodes neglectus</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
19	Gnaphosidae	<i>Drassodes neglectus</i>	2		2	Colin Lake area, "Esker Lake"	Pit traps. Beach ridge	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
36	Gnaphosidae	<i>Drassodes neglectus</i>	2		2	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
46	Gnaphosidae	<i>Drassodes neglectus</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
6	Gnaphosidae	<i>Gnaphosa borea</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Bog	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
7	Gnaphosidae	<i>Gnaphosa borea</i>	1	1	2	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Bog area	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
11	Gnaphosidae	<i>Gnaphosa borea</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top. 4	6 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
15	Gnaphosidae	<i>Gnaphosa borea</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
16	Gnaphosidae	<i>Gnaphosa borea</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Beach ridge	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
19	Gnaphosidae	<i>Gnaphosa borea</i>		1	1	Colin Lake area, "Esker Lake"	Pit traps. Beach ridge	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
36	Gnaphosidae	<i>Gnaphosa borea</i>	1		1	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
46	Gnaphosidae	<i>Gnaphosa borea</i>	2		2	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
7	Gnaphosidae	<i>Gnaphosa brumalis</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Bog area	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
9	Gnaphosidae	<i>Gnaphosa brumalis</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Old growth	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash

Appendix 2. Spiders collected from Colin-Cornwall Lakes Wildland Provincial Park in 2002.

Vial #	Family	Species	# Males	# Females	Total specimens	Location	Habitat / Collection technique	Date	Collector
11	Gnaphosidae	<i>Gnaphosa brumalis</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top. 4	6 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
12	Gnaphosidae	<i>Gnaphosa brumalis</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
16	Gnaphosidae	<i>Gnaphosa brumalis</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Beach ridge	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
19	Gnaphosidae	<i>Gnaphosa brumalis</i>	4		4	Colin Lake area, "Esker Lake"	Pit traps. Beach ridge	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
46	Gnaphosidae	<i>Gnaphosa brumalis</i>	4		4	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
36	Gnaphosidae	<i>Gnaphosa microps</i>		1	1	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
45	Gnaphosidae	<i>Gnaphosa microps</i>		1	1	Colin Lake, Trapper's Island		6-9 Jul 2002	Ted Johnson
8	Gnaphosidae	<i>Gnaphosa muscorum</i>		2	2	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Beach	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
9	Gnaphosidae	<i>Gnaphosa muscorum</i>	6		6	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Old growth	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
11	Gnaphosidae	<i>Gnaphosa muscorum</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top. 4	6 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
13	Gnaphosidae	<i>Gnaphosa muscorum</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
14	Gnaphosidae	<i>Gnaphosa muscorum</i>	2		2	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	6-8 Jul 2010	G.J. Hiltchie, D.N. Hiltchie, L. Ash
18	Gnaphosidae	<i>Gnaphosa muscorum</i>		1	1	Colin Lake area, "Esker Lake"	Pit traps. Ridge top	7-9 Jul 2006	G.J. Hiltchie, D.N. Hiltchie, L. Ash
19	Gnaphosidae	<i>Gnaphosa muscorum</i>	4	7	11	Colin Lake area, "Esker Lake"	Pit traps. Beach ridge	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
20	Gnaphosidae	<i>Gnaphosa muscorum</i>	3		3	Colin Lake area, "Esker Lake"	Pan traps. Duncan's dunk	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
21	Gnaphosidae	<i>Gnaphosa muscorum</i>	3		3	Colin Lake	Pit traps	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
24	Gnaphosidae	<i>Gnaphosa muscorum</i>	2		2	Colin Lake area, "Esker Lake"	South end of lake. Pit traps	8-9 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
36	Gnaphosidae	<i>Gnaphosa muscorum</i>	3		3	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
46	Gnaphosidae	<i>Gnaphosa muscorum</i>	1	1	2	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
47	Gnaphosidae	<i>Gnaphosa muscorum</i>		1	1	Colin Lake area, "Esker Lake"		9 Jul 2002	Wayne Nordstrom
22	Gnaphosidae	<i>Gnaphosa parvula</i>	1		1	Colin Lake area, "Esker Lake"	Outlet Creek. Pit traps	8-9 Jul 2008	G.J. Hiltchie, D.N. Hiltchie, L. Ash
7	Gnaphosidae	<i>Haplodrassus hiemalis</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Bog area	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
9	Gnaphosidae	<i>Haplodrassus hiemalis</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Old growth	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
12	Gnaphosidae	<i>Haplodrassus hiemalis</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
14	Gnaphosidae	<i>Haplodrassus hiemalis</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	6-8 Jul 2011	G.J. Hiltchie, D.N. Hiltchie, L. Ash
22	Gnaphosidae	<i>Haplodrassus hiemalis</i>	1		1	Colin Lake area, "Esker Lake"	Outlet Creek. Pit traps	8-9 Jul 2009	G.J. Hiltchie, D.N. Hiltchie, L. Ash
36	Gnaphosidae	<i>Haplodrassus hiemalis</i>	2		2	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
46	Gnaphosidae	<i>Haplodrassus hiemalis</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
47	Gnaphosidae	<i>Haplodrassus hiemalis</i>	1		1	Colin Lake area, "Esker Lake"		9 Jul 2002	Wayne Nordstrom
46	Gnaphosidae	<i>Haplodrassus signifer</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
4	Gnaphosidae	<i>Micaria aenea</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Carrion bait	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
9	Gnaphosidae	<i>Micaria aenea</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Old growth	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
17	Gnaphosidae	<i>Micaria aenea</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
19	Gnaphosidae	<i>Micaria aenea</i>		1	1	Colin Lake area, "Esker Lake"	Pit traps. Beach ridge	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
23	Gnaphosidae	<i>Micaria aenea</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Beach ridge. Pit traps. 5	6-7 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
46	Gnaphosidae	<i>Micaria aenea</i>	15		15	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
21	Gnaphosidae	<i>Micaria rossica</i>	1		1	Colin Lake	Pit traps	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
27	Gnaphosidae	<i>Micaria rossica</i>		1	1	Colin Lake area, "Esker Lake"	Bear Point	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
31	Gnaphosidae	<i>Micaria rossica</i>		1	1	Colin Lake	Beach. Pit traps	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
7	Gnaphosidae	<i>Orodassus canadensis</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Bog area	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
11	Gnaphosidae	<i>Sergiolus montanus</i>	1		2	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top. 4	6 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
13	Gnaphosidae	<i>Sergiolus montanus</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
18	Gnaphosidae	<i>Sergiolus montanus</i>	1		1	Colin Lake area, "Esker Lake"	Pit traps. Ridge top	7-9 Jul 2008	G.J. Hiltchie, D.N. Hiltchie, L. Ash
14	Gnaphosidae	<i>Zelotes fratris</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	6-8 Jul 2009	G.J. Hiltchie, D.N. Hiltchie, L. Ash
20	Gnaphosidae	<i>Zelotes fratris</i>		1	1	Colin Lake area, "Esker Lake"	Pan traps. Duncan's dunk	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
46	Gnaphosidae	<i>Zelotes fratris</i>		2	2	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
8	Gnaphosidae	<i>Zelotes puritanus</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Beach	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash

Appendix 2. Spiders collected from Colin-Cornwall Lakes Wildland Provincial Park in 2002.

Vial #	Family	Species	# Males	# Females	Total specimens	Location	Habitat / Collection technique	Date	Collector
11	Gnaphosidae	<i>Zelotes puritanus</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top. 4	6 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
14	Gnaphosidae	<i>Zelotes puritanus</i>	4	2	6	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	6-8 Jul 2008	G.J. Hiltchie, D.N. Hiltchie, L. Ash
19	Gnaphosidae	<i>Zelotes puritanus</i>	1		1	Colin Lake area, "Esker Lake"	Pit traps. Beach ridge	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
20	Gnaphosidae	<i>Zelotes puritanus</i>	2		2	Colin Lake area, "Esker Lake"	Pan traps. Duncan's dunk	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
24	Gnaphosidae	<i>Zelotes puritanus</i>		1	1	Colin Lake area, "Esker Lake"	South end of lake. Pit traps	8-9 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
43	Gnaphosidae	<i>Zelotes puritanus</i>		1	1	Colin Lake		10 Jul 2002	Ted Johnson
46	Gnaphosidae	<i>Zelotes puritanus</i>	6		6	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
46	Linyphiidae (Erigoninae)	<i>Ceratinopsis stativa</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
46	Linyphiidae (Erigoninae)	<i>Cnephalocotes obscurus</i>	2		2	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
21	Linyphiidae (Erigoninae)	<i>Erigone atra</i>		1	1	Colin Lake	Pit traps	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
46	Linyphiidae (Erigoninae)	<i>Erigone atra</i>		1	1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
46	Linyphiidae (Erigoninae)	<i>Erigone dentigera</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
46	Linyphiidae (Erigoninae)	<i>Glyphesis scopulifer</i>		1	1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
30	Linyphiidae (Erigoninae)	<i>Gonatium crassipalpum</i>		1	1	Colin Lake	Carrion bait	8-10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
45	Linyphiidae (Erigoninae)	<i>Grammonota gigas</i>	2		2	Colin Lake, Trapper's Island		6-9 Jul 2002	Ted Johnson
46	Linyphiidae (Erigoninae)	<i>Hilaira herniosa</i>		1	1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
46	Linyphiidae (Erigoninae)	<i>Satlatlas sp.</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
46	Linyphiidae (Erigoninae)	<i>Sciastes truncatus</i>	2		2	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
16	Linyphiidae (Erigoninae)	<i>Sisis #1</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Beach ridge	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
23	Linyphiidae (Erigoninae)	<i>Sisis #1</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Beach ridge. Pit traps. 5	6-7 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
46	Linyphiidae (Erigoninae)	<i>Sisis #1</i>	3		3	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
36	Linyphiidae (Erigoninae)	<i>Walckenaeria communis</i>		1	1	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
46	Linyphiidae (Erigoninae)	<i>Walckenaeria karpinskii</i>	3	1	4	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
36	Linyphiidae (Erigoninae)	<i>Walckenaeria tricornis</i>	1		1	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
22	Linyphiidae (Linyphiinae)	<i>Agyneta olivacea</i>		1	1	Colin Lake area, "Esker Lake"	Outlet Creek. Pit traps	8-9 Jul 2007	G.J. Hiltchie, D.N. Hiltchie, L. Ash
45	Linyphiidae (Linyphiinae)	<i>Agyneta olivacea</i>		1	1	Colin Lake, Trapper's Island		6-9 Jul 2002	Ted Johnson
26	Linyphiidae (Linyphiinae)	<i>Bathypantes pallidus</i>	2		2	Colin Lake area, "Esker Lake"	Esker Creek. Pit trap	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
45	Linyphiidae (Linyphiinae)	<i>Bathypantes pallidus</i>	1		1	Colin Lake, Trapper's Island		6-9 Jul 2002	Ted Johnson
38	Linyphiidae (Linyphiinae)	<i>Kaestneria rufula</i>	1		1	Colin Lake	South facing sand slope. Juniper, saxifrage, bare sand 1/2 mi. NE of camp.	9 Jun 2002	Ted Johnson
4	Linyphiidae (Linyphiinae)	<i>Lepthyphantes alpinus</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Carrion bait	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
26	Linyphiidae (Linyphiinae)	<i>Microneta viaria</i>	1		1	Colin Lake area, "Esker Lake"	Esker Creek. Pit trap	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
26	Linyphiidae (Linyphiinae)	<i>Neriene clathrata</i>		1	1	Colin Lake area, "Esker Lake"	Esker Creek. Pit trap	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
36	Linyphiidae (Linyphiinae)	<i>Neriene radiata</i>	1		1	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
46	Linyphiidae (Linyphiinae)	<i>Oreonetides vaginatus</i>	3		3	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
9	Linyphiidae (Linyphiinae)	<i>Pityohyphantes subarcticus</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Old growth	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
17	Linyphiidae (Linyphiinae)	<i>Pityohyphantes subarcticus</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
41	Linyphiidae (Linyphiinae)	<i>Pityohyphantes subarcticus</i>	1		1	Colin Lake	West end	8 Jul 2002	Ted Johnson
46	Linyphiidae (Linyphiinae)	<i>Pityohyphantes subarcticus</i>	3		3	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
8	Lycosidae	<i>Alopecosa aculeata</i>		2	2	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Beach	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
11	Lycosidae	<i>Alopecosa aculeata</i>		2	2	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top. 4	6 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
15	Lycosidae	<i>Alopecosa aculeata</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
18	Lycosidae	<i>Alopecosa aculeata</i>	1	1	2	Colin Lake area, "Esker Lake"	Pit traps. Ridge top	7-9 Jul 2004	G.J. Hiltchie, D.N. Hiltchie, L. Ash
19	Lycosidae	<i>Alopecosa aculeata</i>	3		3	Colin Lake area, "Esker Lake"	Pit traps. Beach ridge	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
36	Lycosidae	<i>Alopecosa aculeata</i>	10	1	11	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
44	Lycosidae	<i>Alopecosa aculeata</i>	1		1	Woodman Lake	North shore	10 Jun 2002	Ted Johnson
46	Lycosidae	<i>Alopecosa aculeata</i>	19	2	21	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
7	Lycosidae	<i>Arctosa alpigena</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Bog area	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash

Appendix 2. Spiders collected from Colin-Cornwall Lakes Wildland Provincial Park in 2002.

Vial #	Family	Species	# Males	# Females	Total specimens	Location	Habitat / Collection technique	Date	Collector
11	Lycosidae	<i>Arctosa alpigena</i>		2	2	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top. 4	6 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
15	Lycosidae	<i>Arctosa alpigena</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
17	Lycosidae	<i>Arctosa alpigena</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
19	Lycosidae	<i>Arctosa alpigena</i>	1	2	3	Colin Lake area, "Esker Lake"	Pit traps. Beach ridge	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
20	Lycosidae	<i>Arctosa alpigena</i>	1		1	Colin Lake area, "Esker Lake"	Pan traps. Duncan's dunk	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
23	Lycosidae	<i>Arctosa alpigena</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Beach ridge. Pit traps. 5	6-7 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
46	Lycosidae	<i>Arctosa alpigena</i>	3	1	4	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
40	Lycosidae	<i>Arctosa raptor</i>	1		1	Colin Lake area, "Esker Lake"	West end of lake	8 Jun 2002	D. Macaulay
46	Lycosidae	<i>Arctosa raptor</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
47	Lycosidae	<i>Arctosa raptor</i>	1		1	Colin Lake area, "Esker Lake"		9 Jul 2002	Wayne Nordstrom
13	Lycosidae	<i>Hogna frondicola</i>		3	3	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
15	Lycosidae	<i>Hogna frondicola</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
19	Lycosidae	<i>Hogna frondicola</i>		3	3	Colin Lake area, "Esker Lake"	Pit traps. Beach ridge	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
47	Lycosidae	<i>Hogna frondicola</i>		1	1	Colin Lake area, "Esker Lake"		9 Jul 2002	Wayne Nordstrom
21	Lycosidae	<i>Pardosa concinna</i>	1		1	Colin Lake	Pit traps	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
31	Lycosidae	<i>Pardosa concinna</i>	1		1	Colin Lake	Beach. Pit traps	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
43	Lycosidae	<i>Pardosa concinna</i>	2	1	3	Colin Lake		10 Jul 2002	Ted Johnson
22	Lycosidae	<i>Pardosa fuscula</i>		2	2	Colin Lake area, "Esker Lake"	Outlet Creek. Pit traps	8-9 Jul 2003	G.J. Hiltchie, D.N. Hiltchie, L. Ash
25	Lycosidae	<i>Pardosa fuscula</i>		1	1	Colin Lake area, "Esker Lake"	Esker Creek. Pit traps. 6	9 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
28	Lycosidae	<i>Pardosa fuscula</i>	4	1	5	Colin Lake area, "Esker Lake"	Woodman Creek. Beaver lodge. Pit traps	8-10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
36	Lycosidae	<i>Pardosa fuscula</i>	1	1	2	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
45	Lycosidae	<i>Pardosa fuscula</i>	1	1	2	Colin Lake, Trapper's Island		6-9 Jul 2002	Ted Johnson
46	Lycosidae	<i>Pardosa fuscula</i>	6	2	8	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
6	Lycosidae	<i>Pardosa hyperborea</i>	11	4	15	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Bog	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
7	Lycosidae	<i>Pardosa hyperborea</i>	3		3	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Bog area	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
14	Lycosidae	<i>Pardosa hyperborea</i>	2		2	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	6-8 Jul 2003	G.J. Hiltchie, D.N. Hiltchie, L. Ash
15	Lycosidae	<i>Pardosa hyperborea</i>	3		3	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
20	Lycosidae	<i>Pardosa hyperborea</i>	1		1	Colin Lake area, "Esker Lake"	Pan traps. Duncan's dunk	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
27	Lycosidae	<i>Pardosa hyperborea</i>	1		1	Colin Lake area, "Esker Lake"	Bear Point	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
36	Lycosidae	<i>Pardosa hyperborea</i>	27	1	28	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
42	Lycosidae	<i>Pardosa hyperborea</i>	3		3	Colin Lake	West end	11 Jun 2002	Ted Johnson
45	Lycosidae	<i>Pardosa hyperborea</i>	2		2	Colin Lake, Trapper's Island		6-9 Jul 2002	Ted Johnson
8	Lycosidae	<i>Pardosa mackenziana</i>		3	3	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Beach	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
9	Lycosidae	<i>Pardosa mackenziana</i>	14	1	15	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Old growth	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
11	Lycosidae	<i>Pardosa mackenziana</i>	3	3	6	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top. 4	6 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
13	Lycosidae	<i>Pardosa mackenziana</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
14	Lycosidae	<i>Pardosa mackenziana</i>	2	2	4	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	6-8 Jul 2005	G.J. Hiltchie, D.N. Hiltchie, L. Ash
15	Lycosidae	<i>Pardosa mackenziana</i>	4	2	6	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
19	Lycosidae	<i>Pardosa mackenziana</i>	3	6	9	Colin Lake area, "Esker Lake"	Pit traps. Beach ridge	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
20	Lycosidae	<i>Pardosa mackenziana</i>	10	3	13	Colin Lake area, "Esker Lake"	Pan traps. Duncan's dunk	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
21	Lycosidae	<i>Pardosa mackenziana</i>	3		3	Colin Lake	Pit traps	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
23	Lycosidae	<i>Pardosa mackenziana</i>	4	1	5	Colin Lake area, "Esker Lake"	Base camp. Beach ridge. Pit traps. 5	6-7 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
24	Lycosidae	<i>Pardosa mackenziana</i>	7		7	Colin Lake area, "Esker Lake"	South end of lake. Pit traps	8-9 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
30	Lycosidae	<i>Pardosa mackenziana</i>	1		1	Colin Lake	Carrion bait	8-10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
31	Lycosidae	<i>Pardosa mackenziana</i>	2		2	Colin Lake	Beach. Pit traps	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
36	Lycosidae	<i>Pardosa mackenziana</i>	15	1	16	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
42	Lycosidae	<i>Pardosa mackenziana</i>	1		1	Colin Lake	West end	11 Jun 2002	Ted Johnson

Appendix 2. Spiders collected from Colin-Cornwall Lakes Wildland Provincial Park in 2002.

Vial #	Family	Species	# Males	# Females	Total specimens	Location	Habitat / Collection technique	Date	Collector
43	Lycosidae	<i>Pardosa mackenziana</i>	1		1	Colin Lake		10 Jul 2002	Ted Johnson
45	Lycosidae	<i>Pardosa mackenziana</i>	1		1	Colin Lake, Trapper's Island		6-9 Jul 2002	Ted Johnson
47	Lycosidae	<i>Pardosa mackenziana</i>	2	1	3	Colin Lake area, "Esker Lake"		9 Jul 2002	Wayne Nordstrom
22	Lycosidae	<i>Pardosa moesta</i>	4	2	6	Colin Lake area, "Esker Lake"	Outlet Creek. Pit traps	8-9 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
23	Lycosidae	<i>Pardosa moesta</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Beach ridge. Pit traps. 5	6-7 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
26	Lycosidae	<i>Pardosa moesta</i>	8		8	Colin Lake area, "Esker Lake"	Esker Creek. Pit trap	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
27	Lycosidae	<i>Pardosa moesta</i>	1		1	Colin Lake area, "Esker Lake"	Bear Point	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
28	Lycosidae	<i>Pardosa moesta</i>	1		1	Colin Lake area, "Esker Lake"	Woodman Creek. Beaver lodge. Pit traps	8-10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
36	Lycosidae	<i>Pardosa moesta</i>	17		17	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
42	Lycosidae	<i>Pardosa moesta</i>	2		2	Colin Lake	West end	11 Jun 2002	Ted Johnson
45	Lycosidae	<i>Pardosa moesta</i>	3	1	4	Colin Lake, Trapper's Island		6-9 Jul 2002	Ted Johnson
46	Lycosidae	<i>Pardosa moesta</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
47	Lycosidae	<i>Pardosa moesta</i>	1		1	Colin Lake area, "Esker Lake"		9 Jul 2002	Wayne Nordstrom
8	Lycosidae	<i>Pardosa tesquorum</i>	3		3	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Beach	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
14	Lycosidae	<i>Pardosa tesquorum</i>	3	3	6	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
15	Lycosidae	<i>Pardosa tesquorum</i>	21	7	28	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
6	Lycosidae	<i>Pardosa uintana</i>	4	1	5	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Bog	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
7	Lycosidae	<i>Pardosa uintana</i>	5	4	9	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Bog area	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
9	Lycosidae	<i>Pardosa uintana</i>	1	2	3	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Old growth	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
11	Lycosidae	<i>Pardosa uintana</i>	1	1	2	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top. 4	6 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
12	Lycosidae	<i>Pardosa uintana</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
16	Lycosidae	<i>Pardosa uintana</i>	2		2	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Beach ridge	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
17	Lycosidae	<i>Pardosa uintana</i>	1	4	5	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
22	Lycosidae	<i>Pardosa uintana</i>		1	1	Colin Lake area, "Esker Lake"	Outlet Creek. Pit traps	8-9 Jul 2005	G.J. Hiltchie, D.N. Hiltchie, L. Ash
23	Lycosidae	<i>Pardosa uintana</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Beach ridge. Pit traps. 5	6-7 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
36	Lycosidae	<i>Pardosa uintana</i>	6	1	7	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
45	Lycosidae	<i>Pardosa uintana</i>	1		1	Colin Lake, Trapper's Island		6-9 Jul 2002	Ted Johnson
46	Lycosidae	<i>Pardosa uintana</i>	7	5	12	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
7	Lycosidae	<i>Pardosa xerampelina</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Bog area	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
8	Lycosidae	<i>Pardosa xerampelina</i>		4	4	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Beach	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
14	Lycosidae	<i>Pardosa xerampelina</i>		2	2	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	6-8 Jul 2006	G.J. Hiltchie, D.N. Hiltchie, L. Ash
15	Lycosidae	<i>Pardosa xerampelina</i>	1	3	4	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
19	Lycosidae	<i>Pardosa xerampelina</i>		1	1	Colin Lake area, "Esker Lake"	Pit traps. Beach ridge	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
22	Lycosidae	<i>Pardosa xerampelina</i>	1	1	2	Colin Lake area, "Esker Lake"	Outlet Creek. Pit traps	8-9 Jul 2004	G.J. Hiltchie, D.N. Hiltchie, L. Ash
23	Lycosidae	<i>Pardosa xerampelina</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Beach ridge. Pit traps. 5	6-7 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
26	Lycosidae	<i>Pardosa xerampelina</i>		2	2	Colin Lake area, "Esker Lake"	Esker Creek. Pit trap	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
27	Lycosidae	<i>Pardosa xerampelina</i>	3	4	7	Colin Lake area, "Esker Lake"	Bear Point	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
46	Lycosidae	<i>Pardosa xerampelina</i>	13	2	15	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
6	Lycosidae	<i>Pirata bryantae</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Bog	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
45	Lycosidae	<i>Pirata bryantae</i>	1		1	Colin Lake, Trapper's Island		6-9 Jul 2002	Ted Johnson
36	Lycosidae	<i>Pirata canadensis</i>	3	1	4	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
28	Lycosidae	<i>Pirata insularis</i>		1	1	Woodman Creek	Woodman Creek. Beaver lodge. Pit traps	8-10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
41	Lycosidae	<i>Pirata insularis</i>		1	1	Colin Lake	West end	8 Jul 2002	Ted Johnson
45	Lycosidae	<i>Pirata insularis</i>	2	1	3	Colin Lake, Trapper's Island		6-9 Jul 2002	Ted Johnson
22	Lycosidae	<i>Pirata piraticus</i>	6	1	7	Colin Lake area, "Esker Lake"	Outlet Creek. Pit traps	8-9 Jul 2006	G.J. Hiltchie, D.N. Hiltchie, L. Ash
26	Lycosidae	<i>Pirata piraticus</i>	7	2	9	Colin Lake area, "Esker Lake"	Esker Creek. Pit trap	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
28	Lycosidae	<i>Pirata piraticus</i>		1	1	Woodman Creek	Woodman Creek. Beaver lodge. Pit traps	8-10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash

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Vial #	Family	Species	# Males	# Females	Total specimens	Location	Habitat / Collection technique	Date	Collector
45	Lycosidae	<i>Pirata piraticus</i>	8	2	10	Colin Lake, Trapper's Island		6-9 Jul 2002	Ted Johnson
47	Lycosidae	<i>Pirata piraticus</i>		1	1	Colin Lake area, "Esker Lake"		9 Jul 2002	Wayne Nordstrom
46	Lycosidae	<i>Trochosa pratensis</i>	4		4	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
2	Philodromidae	<i>Philodromus cespitum</i>	1		1	Colin Lake area, "Esker Lake"	UV trap	10-11 Jul 2003	G.J. Hiltchie, D.N. Hiltchie, L. Ash
34	Philodromidae	<i>Philodromus cespitum</i>		2	2	Woodman Lake		11 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
36	Philodromidae	<i>Philodromus imbecillus</i>	1		1	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
17	Philodromidae	<i>Philodromus mysticus</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
46	Philodromidae	<i>Philodromus mysticus</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
19	Philodromidae	<i>Philodromus placidus</i>	1		1	Colin Lake area, "Esker Lake"	Pit traps. Beach ridge	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
47	Philodromidae	<i>Philodromus placidus</i>	1		1	Colin Lake area, "Esker Lake"		9 Jul 2002	Wayne Nordstrom
15	Philodromidae	<i>Philodromus rufus</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
46	Philodromidae	<i>Philodromus rufus</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
47	Philodromidae	<i>Philodromus rufus</i>		1	1	Colin Lake area, "Esker Lake"		9 Jul 2002	Wayne Nordstrom
8	Philodromidae	<i>Thanatus coloradensis</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Beach	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
13	Philodromidae	<i>Thanatus coloradensis</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
18	Philodromidae	<i>Thanatus coloradensis</i>	4		4	Colin Lake area, "Esker Lake"	Pit traps. Ridge top	7-9 Jul 2003	G.J. Hiltchie, D.N. Hiltchie, L. Ash
15	Philodromidae	<i>Tibellus maritimus</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
28	Philodromidae	<i>Tibellus maritimus</i>	1		1	Woodman Creek	Woodman Creek. Beaver lodge. Pit traps	8-10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
41	Philodromidae	<i>Tibellus maritimus</i>	1	1	2	Colin Lake	West end	8 Jul 2002	Ted Johnson
36	Philodromidae	<i>Tibellus oblongus</i>	1		1	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
29	Pisauridae	<i>Dolomedes triton</i>	1		1	Colin Lake area, "Esker Lake"	West end	8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
47	Pisauridae	<i>Dolomedes triton</i>	1		1	Colin Lake area, "Esker Lake"		9 Jul 2002	Wayne Nordstrom
48	Pisauridae	<i>Dolomedes triton</i>	1		1	Colin Lake area, "Esker Lake"		6 Jul 2002	Wayne Nordstrom
5	Salticidae	<i>Eris militaris</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Hand collecting	11 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
37	Salticidae	<i>Eris militaris</i>	1		1	Colin Lake	Southeast bay	11 Jun 2002	Ted Johnson
41	Salticidae	<i>Eris militaris</i>	5	1	6	Colin Lake	West end	8 Jul 2002	Ted Johnson
38	Salticidae	<i>Evarcha prozyskii</i>	1		1	Colin Lake	Southern facing sand slope. Juniper, saxifrage, bare sand 1/2 mi. NE of camp.	9 Jun 2002	Ted Johnson
46	Salticidae	<i>Evarcha prozyskii</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
38	Salticidae	<i>Habronattus americanus</i>	3	1	4	Colin Lake	Southern facing sand slope. Juniper, saxifrage, bare sand 1/2 mi. NE of camp.	9 Jun 2002	Ted Johnson
47	Salticidae	<i>Habronattus americanus</i>	1		1	Colin Lake area, "Esker Lake"		9 Jul 2002	Wayne Nordstrom
31	Salticidae	<i>Habronattus captiosus</i>	2		2	Colin Lake	Beach. Pit traps	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
32	Salticidae	<i>Pelegrina montana</i>		1	1	Colin Lake area, "Esker Lake"	Malaise trap	7-9 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
36	Salticidae	<i>Pelegrina montana</i>		1	1	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
20	Salticidae	<i>Pellenes ignifrons</i>	1		1	Colin Lake area, "Esker Lake"	Pan traps. Duncan's dunk	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
36	Salticidae	<i>Pellenes lapponicus</i>	1		1	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
15	Salticidae	<i>Phidippus #1</i>		1	1	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
18	Salticidae	<i>Phidippus #1</i>	3		3	Colin Lake area, "Esker Lake"	Pit traps. Ridge top	7-9 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
38	Salticidae	<i>Phidippus #1</i>		1	1	Colin Lake	Southern facing sand slope. Juniper, saxifrage, bare sand 1/2 mi. NE of camp.	9 Jun 2002	Ted Johnson
47	Salticidae	<i>Phidippus #1</i>	1		1	Colin Lake area, "Esker Lake"		9 Jul 2002	Wayne Nordstrom
47	Salticidae	<i>Sitticus finschi</i>	1		1	Colin Lake area, "Esker Lake"		9 Jul 2002	Wayne Nordstrom
46	Salticidae	<i>Sitticus ranieri</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
45	Tetragnathidae	<i>Pachygnatha clercki</i>		1	1	Colin Lake, Trapper's Island		6-9 Jul 2002	Ted Johnson
2	Tetragnathidae	<i>Tetragnatha dearmata</i>	1		1	Colin Lake area, "Esker Lake"	UV trap	10-11 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
47	Tetragnathidae	<i>Tetragnatha elongata</i>	1		1	Colin Lake area, "Esker Lake"		9 Jul 2002	Wayne Nordstrom
41	Tetragnathidae	<i>Tetragnatha extensa</i>	2	3	5	Colin Lake	West end	8 Jul 2002	Ted Johnson
1	Tetragnathidae	<i>Tetragnatha sp.</i>		1	1	Colin Lake area, "Esker Lake"	UV trap	8-9 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
33	Tetragnathidae	<i>Tetragnatha sp.</i>		1	1	Woodman Creek		8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash

Appendix 2. Spiders collected from Colin-Cornwall Lakes Wildland Provincial Park in 2002.

Vial #	Family	Species	# Males	# Females	Total specimens	Location	Habitat / Collection technique	Date	Collector
42	Tetragnathidae	<i>Tetragnatha</i> sp.		2	2	Colin Lake	West end	11 Jun 2002	Ted Johnson
47	Tetragnathidae	<i>Tetragnatha</i> sp.		1	1	Colin Lake area, "Esker Lake"		9 Jul 2002	Wayne Nordstrom
17	Tetragnathidae	<i>Tetragnatha versicolor</i>	2		2	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
41	Tetragnathidae	<i>Tetragnatha versicolor</i>	1	1	2	Colin Lake	West end	8 Jul 2002	Ted Johnson
44	Theridiidae	<i>Crustulina sticta</i>		2	2	Woodman Lake	North shore	10 Jun 2002	Ted Johnson
46	Theridiidae	<i>Crustulina sticta</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
46	Theridiidae	<i>Euryopsis argentea</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
46	Theridiidae	<i>Robertus fuscus</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
31	Theridiidae	<i>Steatoda albomaculata</i>		1	1	Colin Lake	Beach. Pit traps	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
43	Theridiidae	<i>Steatoda albomaculata</i>	1		1	Colin Lake		10 Jul 2002	Ted Johnson
9	Theridiidae	<i>Steatoda borealis</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Old growth	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
46	Theridiidae	<i>Steatoda borealis</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
41	Theridiidae	<i>Theridion differens</i>		1	1	Colin Lake	West end	8 Jul 2002	Ted Johnson
17	Thomisidae	<i>Ozyptila sincera canadensis</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
46	Thomisidae	<i>Ozyptila sincera canadensis</i>	2		2	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
36	Thomisidae	<i>Xysticus</i> #1	1		1	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
	Thomisidae	<i>Xysticus</i> #1	3	1	4	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
17	Thomisidae	<i>Xysticus britcheri</i>	2		2	Colin Lake area, "Esker Lake"	Base camp. Pit traps.	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
45	Thomisidae	<i>Xysticus britcheri</i>	1		1	Colin Lake, Trapper's Island		6-9 Jul 2002	Ted Johnson
33	Thomisidae	<i>Xysticus chippewa</i>		1	1	Woodman Creek		8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
18	Thomisidae	<i>Xysticus emertoni</i>	1		1	Colin Lake area, "Esker Lake"	Pit traps. Ridge top	7-9 Jul 2005	G.J. Hiltchie, D.N. Hiltchie, L. Ash
36	Thomisidae	<i>Xysticus emertoni</i>	5		5	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
46	Thomisidae	<i>Xysticus emertoni</i>	5		5	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
47	Thomisidae	<i>Xysticus emertoni</i>	1		1	Colin Lake area, "Esker Lake"		9 Jul 2002	Wayne Nordstrom
9	Thomisidae	<i>Xysticus luctuosus</i>	2		2	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Old growth	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
19	Thomisidae	<i>Xysticus luctuosus</i>	1		1	Colin Lake area, "Esker Lake"	Pit traps. Beach ridge	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
36	Thomisidae	<i>Xysticus obscurus</i>	1		1	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson
46	Thomisidae	<i>Xysticus obscurus</i>	1		1	Colin Lake area, "Esker Lake"		6-14 Jun 2002	Wayne Nordstrom
9	Titanoecidae	<i>Titanoeca nivalis</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Old growth	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
11	Titanoecidae	<i>Titanoeca nivalis</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top. 4	6 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
12	Titanoecidae	<i>Titanoeca nivalis</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top	6-8 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
13	Titanoecidae	<i>Titanoeca nivalis</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Pit traps. Ridge top	10 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
18	Titanoecidae	<i>Titanoeca nivalis</i>	1		1	Colin Lake area, "Esker Lake"	Pit traps. Ridge top	7-9 Jul 2009	G.J. Hiltchie, D.N. Hiltchie, L. Ash
23	Titanoecidae	<i>Titanoeca nivalis</i>	1		1	Colin Lake area, "Esker Lake"	Base camp. Beach ridge. Pit traps. 5	6-7 Jul 2002	G.J. Hiltchie, D.N. Hiltchie, L. Ash
36	Titanoecidae	<i>Titanoeca nivalis</i>	10		10	Colin Lake area, "Esker Lake"	Pan traps	6-9 Jul 2002	Ted Johnson