An Annotated Checklist of the Spiders of Newfoundland

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Since Hackman's report in 1954 of 216 (adjusted from a total of 220 for apparent errors) spider species from Newfoundland, the total has grown by 68% to 363. An annotated checklist is presented. Of this total, 223 (c. 61%) are Nearctic, 119 (c. 33%) are Holarctic and 21 (c. 6%) are introduced. Comparisons are made with other Canadian spider faunas. The introduced species and the proportions of Linyphiidae, Lycosidae and Dictynidae are discussed.

Key Words: Araneae, species distribution, introduced species, Newfoundland.

Hackman's (1954) list of Newfoundland (referring solely to the insular portion of the province of that name) spiders was the first such report for any Canadian province. Since then lists for four more provinces and territories have been published: British Columbia (West et al. 1984, 1988; Bennett 2001); Yukon (Dondale et al. 1997); Manitoba (Aitchison-Benell and Dondale 1990), and Quebec (Bélanger and Hutchinson 1992; Paquin et al. 2001, Paquin and Dupérré 2003). We have made use of additional unpublished data for Alberta and Saskatchewan (Buckle and Holmberg 2004*) and British Columbia (Bennett et al. 2004*).

In 2002 the formal, political name of the province formerly called Newfoundland was changed by Act of Federal Parliament to Newfoundland and Labrador. Therefore since that date it has been proper to use Newfoundland to refer solely to the insular part of the province, and that is the practice adopted here. Newfoundland was entirely or almost entirely covered by ice in the most recent (Wisconsin) glaciation, which reached its maximum extent probably around 24 000 years BP (Dyke et al. 2002). The ice then underwent a series of retreats until the coastal margins of Newfoundland were exposed around 12 000 BP (Shaw 2003), after which time the ice continued to retreat and leave the land exposed. The modern fauna was presumably established by post-glacial immigration aided by some anthropogenic introductions. The presence or absence of biological refugia during that glaciation has long been debated. Such refugia could have been important contributors to the post-glacial colonisation, and evidence thought to indicate their existence in Newfoundland has been presented from a variety of taxa (e.g., Fernald 1924; Wynne-Edwards 1937; Belland 1987; Hamilton and Langor 1987). Ballooning from continental North America on the region's prevailing westerly winds probably accounted for the postglacial arrival of most of Newfoundland's spider species.

It is not altogether clear which species were brought to Newfoundland by humans. The introduction of Palaearctic species by humans is relatively straightforward. The first documented European visitors were Vikings, briefly established at L'Anse aux Meadows around 1000 BP (Wallace 1991). Then since the late 15th century European settlement and commercial traffic can explain the presence of Palaearctic species in Newfoundland. In addition, some Nearctic and Holarctic species may have been brought to the island by the traffic between Newfoundland and the maritime provinces, Labrador and the eastern seaboard of the United States. There were also approximately 5 000 years of aboriginal occupation of Newfoundland before the arrival of Europeans, with continual aboriginal traffic between Labrador and Newfoundland (Renouf 1999). This may account for the presence of some Holarctic and subarctic-Nearctic species.

By whatever means of arrival, 363 species are now known from Newfoundland, an increase of 68% over Hackman's (1954) report of 216 (adjusted total) species.

Ecology of Newfoundland

Newfoundland lies in the northwest Atlantic between approximately 47°-52° north and 53°-59° west and lies within the general ecological region of the Boreal Shield Ecozone. Eleven Ecoregions (encompassing 25 Ecodistricts) are distinguished in Newfoundland, and full details of these are in Ecological Stratification Working Group (1995). More general biogeographical information can be found in South (1983).

Newfoundland's climate is influenced by the surrounding Atlantic ocean in general and the cold Labrador current to the east in particular. Climate varies between the Ecoregions, from a low subarctic ecoclimate in the Strait of Belle Isle Ecoregion on the Northern Peninsula (mean annual temperature 2.5°C), through the maritime high boreal ecoclimate of the Long Range

Mountains (mean annual temperature 4°C), the maritime mid-boreal ecoclimate of Central Newfoundland (mean annual temperature 4.5°C), to the oceanic low boreal ecoclimate of the South Avalon-Burin Oceanic Barrens (mean annual temperature 5.5°C). The dominant vegetation is a mixture of Black Spruce (*Picea mariana*), White Spruce (*Picea glauca*), Balsam Fir (*Abies balsamia*), Tamarack (*Larix decidua*), lesser amounts of birch (*Betula*), extensive peatlands, communities of ericaceous shrubs, crowberry (*Empetrum*) barrens, and mosses and lichens. At higher elevations areas of semi-exposed bedrock are frequent.

Materials and Methods

Abbreviations

Throughout the text the following abbreviations may be employed: AB = Alberta; AMNH = American Museum of Natural History; BC = British Columbia; BL = Belcher Islands, Hudson Bay; CDD = C. D. Dondale; CNC = Canadian National Collection of Insects and Arachnids, Agriculture and Agri-Food Canada, Ottawa; GL = Greenland; GMNP = Gros Morne National Park, Newfoundland; FMNH = Finnish Museum of Natural History, Helsinki; HZ = Hazen Camp, Ellesmere Island; JRP = J. R. Pickavance; MB = Manitoba; MCZ = Museum of Comparative Zoology, Harvard; NF = Island of Newfoundland; PL = Peary Land, Greenland; QC = Quebec; SK = Saskatchewan; TNNP = Terra Nova National Park, NF; YK = Yukon.

A note on Hackman's species total

We have reduced Hackman's (1954) total of 220 by four to give a revised total of 216. Hackman (1954) listed some species on the basis of immature specimens, some of which have not subsequently been confirmed. CDD examined the supposed juveniles of *Tetragnatha* caudata Emerton and T. vermiformis Emerton and concluded that the specimens are of uncertain identity. These two species have therefore been removed from Hackman's (1954) total. Hackman (1954) recorded three species of *Dolomedes* from Newfoundland: *D*. fulviatronotatus Bishop, D. scapularis C. L. Koch and D. vittatus Walckenaer. Dolomedes fulviatronotatus is now D. striatus Giebel, and his D. vittatus was a misidentified specimen of D. striatus. In addition, his record of D. scapularis (junior synonym of D. triton (Walckenaer)) cannot be confirmed because this species is not in Hackman's collection in FMNH, has not subsequently been found in Newfoundland, and has never been brought in by the public for identification (unlike virtually all other species with large adults). We have therefore removed two of the three Dolomedes from Hackman's (1954) total.

This paper is based on published reports of Newfoundland spiders, specimens in the CNC, examination by CDD of collections of Newfoundland spiders deposited elsewhere, and extensive collections by JRP over the last 14 years. Apart from the major collections reported by Hackman (1954), reports of Newfoundland

spiders are rare. These consist of accounts of scattered, small collections (e.g., Pickard-Cambridge 1881; Emerton 1914, 1915, 1927) or lists assembled for particular purposes, e.g., Lindroth's (1957) comparison of European and North American faunas. A number of collectors (e.g., Lloyd Hollett and Kevin Pardy) have deposited Newfoundland specimens in the CNC but have not formally reported on their collections. Most records of Newfoundland spiders occur in taxonomic works such as Gertsch and Ivie (1955), Ivie (1969), Leech (1972), Dondale and Redner (1978, 1982, 1990), Platnick and Dondale (1992), Buckle and Roney (1995), Saaristo and Koponen (1998), and Miller (1999).

We have followed Platnick (2005) for familial placement for the sake of uniformity and consistency. We have followed Platnick (2005) for genera and species names, except that we follow Buckle et al. (2001) for linyphiid nomenclature. For convenience families and species are in alphabetical order.

Species recorded by Hackman (1954) are indicated "[H]". Included in such brackets is the name he used if different from the name in Platnick (2005*) and other relevant notes.

The designations of Nearctic, Holarctic, or Palaearctic listed for each species have been gleaned from various sources (e.g., Buckle et al. 2001; Dondale and Redner 1978, 1982, 1990; Dondale et al. 2003; Platnick 2005*; Roberts 1993). Here we use these terms to mean the biogeographical origin of a species rather than the present-day distribution. For example, *Araneus diadematus* Clerck is listed as Holarctic by Platnick (2005*), but is originally a Palaearctic species introduced to North America (Dondale et al. 2003). Therefore we refer to this and similar species as "Palaearctic; introduced".

It has sometimes been difficult to decide whether a species should be called Palaearctic introduced or truly Holarctic. For example, Buckle et al. (2001) describe Erigone dentipalpis (Wider in Reuss) as "Introduced?" while Platnick (2005*) lists it as Holarctic. Pending clarification we treat this and similar cases as introduced Palaearctic species. Spider introductions to North America were also dealt with by Lindroth (1957), but because significant portions of his information about spiders has been superceded by later work we have placed less emphasis on his records. A particularly problematic species is Theridiosoma gemmosum (L. Koch), traditionally regarded as Palaearctic introduced to North America (e.g., Locket and Millidge 1953). Coddington (1986) questioned this and pointed out it might be a Nearctic species introduced to Europe because it is common in North America but rare in Europe. Here we follow the traditional position because the species is confined to the eastern part of North America, where it may be common because of the amount of its preferred habitat of old-growth and (to a lesser extent) second-growth forest (Coddington 1986), whereas it is very widespread in Europe and Asia.

The true distribution and habitat preferences of most Newfoundland spider species are unknown, with some species known only from one or two records. Note that the localities in the list below more often reflect the activities of collectors than the true distribution of the species. Only a general habitat description is given for each species unless there is some obvious correlation with a particular environment. Note that the term "mixed coniferous woods" (which occurs regularly in the checklist) encompasses a wide diversity of micro-habitats such as dry litter, wet litter, patches of wetland, moss, lichens, bark, leaves, standing water, running water, patches of hardwood shrubs and patches of herbs as well as boundaries with more extensive areas of wetland, barrens or rocky areas. Additional habitat information has been taken from Bélanger and Hutchinson (1992) because the majority of Newfoundland species occur in Quebec, which at least in the middle of that province is broadly ecologically similar to Newfoundland. Habitat information has also been gathered from a variety of other sources, e.g., Chamberlin and Gertsch (1958); Dondale and Redner (1978, 1982, 1990); Dondale et al. (2003); Levi (1971); Opell and Beatty (1976); Paquin and Dupérré (2003) and Platnick and Dondale (1992).

Dates, Depositories and Localities

Dates are expressed e.g. 5Aug98; an unknown day and/or month indicated by 00 (but 00 in the year position means 2000); specimens from a range of dates are indicated e.g. 12-28Aug98. If no date is given collection date is uncertain. One specimen is indicated of or ♀; more than one specimen ♂♂ or ♀♀. Records from other collectors are not included except where no records exist in the JRP collection. All specimens are in the JRP collection (Biology Department, Memorial University of Newfoundland) unless otherwise noted; specimens held elsewhere are indicated e.g. (CNC); specimens of species held both in JRP collection and elsewhere are indicated e.g. (and CNC). For each species a maximum of five locations is given; if a species is known from more than five locations, five were selected to show the general distribution. Locations are arranged alphabetically. Place names are in accordance with Natural Resources Canada: Canadian Geographical Names (2005*) where additional data such as latitude and longitude can be found.

Checklist of Newfoundland Spiders

AGELENIDAE (4 spp.)

Agelenopsis utahana (Chamberlin & Ivie, 1933) [H] Nearctic. Among herbaceous plants in clearings in coniferous woods; corners of walls and fences. Norris Point 18Aug 02♂; Port au Choix 12Jul99♂.

Tegenaria atrica C. L. Koch, 1843

Palaearctic; introduced. Warehouses in Donovans Industrial Park, St. John's.

St. John's 00May959.

Tegenaria domestica (Clerck, 1758)

Palaearctic; introduced. This synanthropic species is common across Newfoundland inside houses (particularly basements), sheds and other structures.

Norris Point14Aug97°; Port au Choix 9Jul04°; Portugal Cove 27May89°; St. John's 29Sep97°; TNNP 11Jun93°.

Tegenaria duellica Simon, 1875

Palaearctic; introduced. Buildings in the Waterford Bridge valley, St. John's.

St. John's 1Jun019; St. John's 20Sep0400.

AMAUROBIIDAE (5 spp.)

Amaurobius borealis Emerton, 1909 [H; Walmus borealis (Emerton)]

Nearctic. Litter of mixed coniferous woods.

Berry Head Pond (GMNP) 10Jul00°; Gander 00Aug98°; Glide Lake 00Jul96°; Main River west 29Jul00°.

Callobius bennetti (Blackwall, 1846) [H]

Nearctic. Litter of mixed coniferous woods; among stones at the back of beaches.

Bakers Brook estuary 11Aug99°; Green Point 26Aug98°; Port au Choix 5Jul04°; Sugar Loaf (St. John's) 00Oct92°; TNNP 11Jun93°.

Coras montanus (Emerton, 1890) [H; Agelenidae]

Nearctic. Litter of mixed coniferous woods; under bark; in crevices between rocks.

Harbour Grace 27May94 $^{\circ}$; St. John's 00Jan96 $^{\circ}$; St. John's 00Sep97 $^{\circ}$.

Cybaeopsis euopla (Bishop & Crosby, 1935) [H; Callioplus euoplus Bishop & Crosby]

Nearctic. Litter of mixed coniferous woods.

Berry Head Pond (GMNP) 19Jul00°; Glide Lake 00Jul96°°; Main River west 00Jul98°°; Nameless Cove 16Aug01°°; Port au Choix 8Jul00°.

Cybaeopsis tibialis (Emerton, 1888) [H; Callioplus tibialis (Emerton)]

Nearctic. Litter of mixed coniferous woods.

Main River west 6Jun98 ♀♂.

Araneidae (20 spp.)

Aculepeira carbonarioides (Keyserling, 1892)

Holarctic. In NF, known only from higher elevations of the Long Range Mountains. It spins large webs strung between boulders and is often seen at the centre of the web during daylight.

Gros Morne Mountain 14Aug94 $^{\circ}$; Highlands of St. John 1Aug98 $^{\circ}$; Killdevil Mountain 9Aug93 $^{\circ}$; Tablelands 12Jun94 $^{\circ}$; Winter House Brook canyon 31Jul97 $^{\circ}$ $^{\circ}$ $^{\circ}$.

Araneus corticarius (Emerton, 1884) [H; from a juvenile female that is not A. corticarius]

Nearctic. Mixed coniferous woods; among bog and swamploving trees and shrubs.

Main River west 12Aug00♂.

Araneus diadematus Clerck, 1758 [H]

Palaearctic; introduced. This is the common Garden Spider of western Europe, often called the Cross Spider in North America because of the characteristic dorsum pattern. Widespread in NF, particularly abundant around human settlements and associated gardens. Also found away from human habitations, although this often indicates an abandoned community (see the discussion of this species below).

Lewisporte 00Oct92°; Mortier Bay 00Oct92°; Norris Point 18Aug99°°; Paradise 00Aug93°; St. John's 8Sep98°.

Araneus groenlandicola (Strand, 1906)

Nearctic. On herbs, low shrubs and stunted trees on open or barren land near the coast. In NF known only from coastal Northern Peninsula; it may be confined to that colder, subarctic area.

Bakers Brook estuary 27Aug98 $^{\circ}$; Burnt Cape 4Aug98 $^{\circ}$; Point Riche 15Aug97 $^{\circ}$; Port au Choix 20Aug02 $^{\circ}$ $^{\circ}$; Shallow Bay 9Aug98 $^{\circ}$ $^{\circ}$.

Araneus marmoreus Clerck, 1758

Holarctic. Mixed coniferous woods; low shrubs near such woods; on rock-cuts along roads through such woods.

Mount Scio 00Aug95♥; Norris Point 30 Jul97♥; Rocky Harbour (Millbrook) 8Aug97♥; Woody Point (Lookout Hills) 11Aug97♥.

Araneus nordmanni (Thorell, 1870)

Holarctic. Mixed coniferous woods; wooden fences and breakwaters.

Boutitou 17Jul03♥; Ferryland 21Sep98♥.

Araneus saevus (L. Koch, 1872) [H; Araneus solitarius (Emerton 1884)]

Holarctic. Mixed coniferous woods; garden vegetation. Topsail (St. John's) $15Aug96^{\circ}$.

Araneus trifolium (Hentz, 1847) [H]

Nearctic. Low shrubs on open or barren ground; tall herbs in clearings in coniferous woods.

Burgeo 13Aug03°; Lobster Cove 20Aug99°; Logy Bay 20Aug03°; Norris Point 15Jul99°; Rocky Harbour (Bottom Brook bog) 16Jul99°.

Araneus washingtoni Levi, 1971

Nearctic. Mixed coniferous woods; low bushes.

Eddies Cove West 30Jul49 $^{\circ}$ (MCZ?); Gambo 25Apr49 $^{\circ}$ (MCZ?).

Araniella displicata (Hentz, 1847) [H; Araneus displicatus (Hentz)]

Holarctic. Mixed coniferous woods. Common.

Bakers Brook estuary 12Aug97 $^{\circ}$; Gander 00Jul98 $^{\circ}$ $^{\circ}$; Logy Bay 13 Aug 01 $^{\circ}$; Millertown 26Jun80 $^{\circ}$ $^{\circ}$; St. John's 8Sep98 $^{\circ}$

Araniella proxima (Kulczyński, 1885)

Holarctic. Mixed coniferous woods. In NF known only from the west of the island.

St Lunaire 15Aug000.

Cyclosa conica (Pallas, 1772) [H]

Holarctic. Mixed coniferous woods. Common.

Blackhead (St. John's) 26Jun97°; Boutitou 17Jul03°; Gander 20Jul98°°; St. John's 13Sep98°°; Stuckless Pond 20Jul93°°.

Hypsosinga pygmaea (Sundevall, 1831) [H; Singa variabilis Emerton 1884]

Holarctic. Edges of mixed coniferous woods; shrubs and herbs in peatlands.

Bay d'Espoir 11Jul85° (CNC); Bottom Brook (which one unknown) 19Aug86° (CNC); North Arm Mountain (Bonne Bay) 13Aug81° (CNC).

Hypsosinga rubens (Hentz, 1847)

Nearctic. Mixed coniferous woods; shrubs and herbs in peatlands.

Gander 00Jun-00Jul81¢ (CNC); Hinds Point 29Jun87¢ (CNC).

Larinioides cornutus (Clerck, 1758)

Holarctic. Shrubs; low trees; between boulders on the Long Range Mountains (where it can co-occur with *Aculepeira carbonarioides*). Common.

Big Brook 18Jun02 $^{\circ}$ $^{\circ}$; New Ferolle 13Jul04 $^{\circ}$ $^{\circ}$; Quidi Vidi 19Sep98 $^{\circ}$ $^{\circ}$; Tablelands 31Jul97 $^{\circ}$ $^{\circ}$; Table Point 16Aug99 $^{\circ}$ $^{\circ}$.

Larinioides patagiatus (Clerck, 1758)

Holarctic. Mixed coniferous woods; low cliffs; tall herbs and shrubs; stunted trees; houses, outbuildings; lower elevations of mountain slopes. Common at least in the centre and west. Badger 24Jun80°; Big Brook 25Jun02°; Boutitou 17Jul03°; Norris Point 30 Jul97°; Point Riche 15Aug97°°.

Larinioides sclopetarius (Clerck, 1758)

Palaearctic; introduced. On houses, sheds and outbuildings, fences, bridges; on mixed vegetation near such structures.

Deer Lake 12Sep98 °; Epworth 2Jun01°; Norris Point 5Aug99°; Rocky Harbour 9Aug97°; St. John's 4Nov93°.

Metepeira palustris Chamberlin & Ivie, 1942 [H]

Nearctic. Clearings and fallen timber in mixed coniferous woods.

Gander 28Jul98 .

Zygiella atrica (C. L. Koch, 1845)

Palaearctic; introduced. Among rocks near the coast; on break-waters and other coastal structures; fences and buildings. Common around the greater St. John's area and the Avalon Peninsula in general; also in Deer lake. Elsewhere around the coast only *Z. nearctica* is found.

Deer Lake $12\text{Sep}97^{\circ}\circ$; Ferryland $21\text{Sep}98^{\circ}\circ$; Flatrock 2Nov $97^{\circ}\circ$; Logy Bay $16\text{Sep}03^{\circ}\circ$; Quidi Vidi $12\text{Oct}97^{\circ}\circ\circ$.

Zygiella nearctica Gertsch, 1964 [H; Zygiella montana (C. L. Koch, 1834)]

Nearctic. Mixed coniferous woods; shrubs; low sea-cliffs; boulders, wharves and other structures near the ocean. Conche 16Jul03°°; Lomond 18Jul97°; Port au Choix

1Aug97♀♀♂; Table Point 5Aug97◦♂; TNNP 11Jun93♂.

CLUBIONIDAE (14 spp.)

Clubiona abbotii L. Koch, 1866 [H]

Nearctic. Litter of mixed coniferous woods; litter under shrubs; edges of peatlands.

Bakers Brook estuary 8-27Aug00°.

Clubiona bryantae Gertsch, 1941 [H]

Nearctic. Litter of mixed coniferous woods and shrubs; rocks at back of beaches; litter at edge of sand dunes; bogs. Berry Head Pond (GMNP) 19Jul00°; Blackhead (St. John's) 12Nov02°°; Green Point 6Jul97°; Nameless Cove

 $16Aug01^{\circ,\circ}$; Shallow Bay $14Aug98^{\circ}$.

Clubiona canadensis Emerton, 1890 [H] Nearctic. Mixed coniferous woods; among herbs in clearings in woods; under bark; on sedges and herbs in wetlands; in leaf-litter in gardens and cultivated areas. Common.

Bakers Brook 8-27Aug00°°; Hawkes Bay 1Jul99°; Port au Choix 20Jul99°°; Squid Cove road 19Jul98°°; St. John's 2Apr00°;

Clubiona furcata Emerton, 1919 [H]

Holarctic. Mixed coniferous woods; litter under shrubs and herbs in marshy places.

Main River west 00Jul98♀.

Clubiona johnsoni Gertsch, 1941 Nearctic. Mixed coniferous woods. TNNP 15Aug80° (CNC).

Clubiona kastoni Gertsch, 1941 Nearctic. Mixed coniferous woods. Port au Choix 3-11Aug00♀♂.

Clubiona kulczynskii Lessert, 1905 [H]

Holarctic. Mixed coniferous woods; herbs in clearings in woods; Empetrum barrens.

Cape Raven 15Aug999; Gander 00Aug98♥♂; Main River west 00Jul98♀♂; Port au Choix 13Jul99♀.

Clubiona mixta Emerton, 1890 [H]

Nearctic. Shrubs and herbs.

Twillingate Island 8Jul51 ♀ (FMNH).

Clubiona moesta Banks, 1896 Holarctic. Mixed coniferous woods. Pasadena 14Aug84° (CNC).

Clubiona norvegica Strand, 1900 [H]

Holarctic. Back of beaches; sand dunes; barren, rocky areas near the coast. Common in the west.

Big Brook 14Jul01 ♀♀♂; Conche 27Jul04♀; New Ferolle 18Aug00♀♀♂♂; Savage Cove 30Jun03♀♀♂; St Pauls 25Jul97♀♂.

Clubiona obesa Hentz, 1847 [H] Nearctic. Shrubs and herbs.

Deer Lake 30May51° (FMNH); Spruce Brook (Georges Lake) 8Jul499 (FMNH).

Clubiona opeongo Edwards, 1958 Nearctic. Exposed rocky barrens. Eddies Cove East 21Jun000.

Clubiona riparia L. Koch, 1866 [H]

Holarctic. Mixed coniferous woods; herbs in clearings in woods; vegetation at back of beaches.

Bakers Brook estuary 26Aug98♥; Green Gardens 5Jul97♂; Norris Point 20Jun00♂; Stanford River 28Jul99♀.

Clubiona trivialis C. L. Koch, 1843

Holarctic. Mixed coniferous woods; herbs in clearings in woods; mixed vegetation at back of beaches.

Blackhead (St. John's) 16Oct019; Burnt Cape 4Aug980; Gander 00Aug98♀♂; Lobster Cove 23Jul97♂♂; Norris Point 27Jun00♀.

CYBAEIDAE (1 sp.)

Cybaeota calcarata (Emerton, 1911) Nearctic. Litter of mixed coniferous woods.

Norris Point 22Jul00 ♀ ♀.

DICTYNIDAE (9 spp.)

Argenna obesa Emerton, 1911 [H]

Nearctic. Wetlands; river banks; clearings in woods. Come by Chance[♀] (CNC); Grand Bank 3Aug51[♀] (FMNH).

Dictyna alaskae Chamberlin & Ivie, 1947

Holarctic. Mixed coniferous woods; shrubs and herbs.

Hampden 18-20Jun77♀♀♂♂ (CNC).

Dictyna arundinacea (Linnaeus, 1758) Holarctic. Mixed coniferous woods; shrubs and herbs. Bay d'Espoir 11Jul85°♂♂ (CNC); Hampden 12Jul77° (CNC); TNNP 7Jul87[♀] (CNC).

Dictyna bostoniensis Emerton, 1888 [H]

Nearctic. Mixed coniferous woods; shrubs and herbs.

Joe Glodes Pond 21Aug49♀♂ (FMNH); Pasadena ♀ (CNC); St. John's 21Jul869 (CNC).

Dictyna brevitarsus Emerton, 1915 [H]

Nearctic. Mixed coniferous woods; shrubs and herbs.

Stag Brook (GMNP)17Jul99♀♂.

Dictyna minuta Emerton, 1888

Nearctic. Mixed coniferous woods.

Berry Head Pond (GMNP) 18Jul999; Gadds Harbour 27Jul97♂ (CNC); Norris Point 27Jul98♀ (and CNC).

Emblyna annulipes (Blackwall, 1846) [H; Dictyna annulipes Blackwall]

Holarctic. Mixed coniferous woods.

Grandy Brook 2Jun49\(\circ\) (FMNH); Hampden 5- 29Jun86\(\circ\)\(\circ\) ♂ (CNC); Pasadena 14Jun849 (CNC); Portland Creek 00Jun74♂ (CNC).

Emblyna phylax (Gertsch & Ivie, 1936) [H; Dictyna phylax Gertsch & Ivie]

Nearctic. Mixed coniferous woods.

Gander 00Jul98&.

Iviella sp.

Not attributed to species; probably new; to be described elsewhere.

Nearctic. Only known from exposed sub-arctic Empetrum barrens on the Northern Peninsula.

Burnt Cape 00Aug03♀♂♂; Killdevil Mountain 17Aug99♀♂; Point Riche 17Aug98♀♀♂♂; Table Point 30Sep98♂.

GNAPHOSIDAE (14 spp.)

Drassodes neglectus (Keyserling, 1887) [H]

Holarctic. Under stones on talus slopes; rocky barren areas; among stones at the back of beaches.

Conche 16Jul03 ° °; Burnt Cape 00Jul03 ° ° ° °; Killdevil Mountain 8Aug94♂; Point Riche 17Jul00♀♂; Port au Choix 4Jul03♂.

Gnaphosa brumalis Thorell, 1875

Nearctic. Wetlands; Empetrum barrens near coast.

Burnt Cape 00Aug03♂; Port au Choix 2Aug96♀; Woody Point (Lookout Hills) 5Jun97♥.

Gnaphosa microps Holm, 1939

Holarctic. Wetlands; Empetrum barrens.

Big Brook 21Jun02[♀]; Killdevil Mountain 17Aug99[♀]♀♂♂; Point Riche 1Aug99♂; Sally's Cove 27Jul99♀; St Lunaire 00Aug00♀.

Gnaphosa muscorum (L. Koch, 1866) [H] Holarctic. Empetrum barrens; rocky areas.

Burnt Cape 00Aug03♀♀♂♂.

Gnaphosa parvula Banks, 1896 [H] Nearctic. Empetrum barrens; rocky areas.

Cape Ray 1Jul969.

Haplodrassus hiemalis (Emerton, 1909) [H]

Holarctic. Empetrum barrens; rocky areas; peatlands.

New Ferolle 13Jul04♥; Point Riche 2Aug99♥♥; Table Point 30Sep98♀♀.

Haplodrassus signifer (C. L. Koch, 1839) [H]

Holarctic. Litter of shrubs and mixed coniferous woods. Burnt Cape 00Aug03でで.

Micaria aenea Thorell, 1871

Holarctic. Litter of shrubs and mixed coniferous woods;

Main River west 00Jul98♂.

Micaria constricta Emerton, 1894 [H; M. longispina Emerton, 1911]

Holarctic. *Empetrum* barrens; rocky areas; peatlands; mixed coniferous woods.

Base of Killdevil Mountain 13Jul499 (FMNH).

Micaria pulicaria (Sundevall, 1831) [H]

Holarctic. *Empetrum* barrens; rocky areas; peatlands; mixed coniferous woods.

Gadds Harbour 11Aug99°; Point Riche 20Aug02°; Shallow Bay 14Aug97°; Tablelands 18Aug99°; Western Brook estuary 24Aug03°°.

Micaria rossica Thorell, 1875

Holarctic. Exposed sub-arctic *Empetrum* barrens on the Northern Peninsula.

Burnt Cape 00Aug03♀.

Orodrassus canadensis Platnick & Shadab, 1975 [H; O. vastus Chamberlin & Ivie, 1922]

Nearctic. Mixed coniferous woods.

Doctors Brook 31Jul49 $^{\circ}$ (FMNH); Eddies Cove West 2Aug49 $^{\circ}\,^{\circ}\,^{\circ}$ (FMNH).

Zelotes fratris Chamberlin, 1920 [H; Z. subterraneus (C. L. Koch, 1833)]

Holarctic. Sand-dunes; rocky coastal areas; shrubby areas on lower slopes of mountains; abandoned meadows. Common. Badger 24Jun80 $^{\circ}$; Conche 27Jul04 $^{\circ}$; St. John's 00Jun95 $^{\circ}$ $^{\circ}$ $^{\sigma}$ $^{\sigma}$; Tablelands 18Aug99 $^{\circ}$ $^{\circ}$ $^{\sigma}$ $^{\sigma}$; Western Brook estuary 25Jul97 $^{\circ}$ $^{\circ}$ $^{\sigma}$ $^{\sigma}$.

Zelotes sula Lowrie and Gertsch, 1955

HAHNIIDAE (6 spp.)

11Jun93♀.

Antistea brunnea (Emerton, 1909) [H]

Nearctic. Peatlands; wet parts of mixed coniferous woods. Bakers Brook estuary 9Aug99°; Berry Head Pond (GMNP) 31Jul00°; Main River west 00Jul98°°; Rocky Harbour 23Jul-20Aug99°°.

Cryphoeca montana Emerton, 1909 [H; Agelenidae] Nearctic. Mixed coniferous woods; under bark; shrubby areas at lower elevations of mountains.

Berry Head Pond (GMNP) 18Jul99°; Gander 00Aug 98°°; Port au Choix 28Jun99°; Tablelands 21Jul99°; TNNP

Hahnia cinerea Emerton, 1890 [H]

Nearctic. Peatlands and bogs.

Burnt Cape 00Aug03♀♀♂♂; Rocky Harbour 2Jul98♂.

Hahnia glacialis Sørensen, 1898

Holarctic. Coastal and alpine *Empetrum* barrens; mixed coniferous woods.

Big Brook 16Jul01°°°, Conche 16Jul03°; Nameless Cove 16Aug01°°°, Point Riche 15Jul00°°; Savage Cove 14Jul01°°°.

Neoantistea agilis (Keyserling, 1887) [H]

Nearctic. Lower slopes of mountains under rocks; litter under shrubs.

Tablelands 18Aug99づき.

Neoantistea magna (Keyserling, 1887) [H; N. riparia radula (Emerton, 1890)]

Nearctic. Mixed coniferous woods; coastal and alpine *Empetrum* barrens; back of beaches; peatlands and bogs.

Bakers Brook estuary 26Aug98♂; Big Brook 25Jun02♀♀;

Hawkes Bay 9Jul04°; base of Killdevil Mountain 17Aug999°°; Sally's Cove 10Aug999°°.

LINYPHIIDAE (191 spp.)

Note: we follow Buckle et al. (2001) for linyphiid nomenclature.

Agyneta allosubtilis Loksa, 1965 [H; Argyneta decora (O. Pickard-Cambridge, 1871)]

Holarctic. Mixed coniferous woods; shrubby areas.

Burnt Cape 00Aug03♀♀♂♂; Killdevil Mountain 20Jul00♂♂.

Agyneta amersaxatilis Saaristo & Koponen, 1998

Nearctic. Exposed coastal *Empetrum* barrens; rocky areas on exposed coasts.

Point Riche 24Jul00♂♂ (and CNC); Port au Choix 5Jul04♂.

Agyneta dynica Saaristo & Koponen, 1998 [H; "Meioneta sp. pr rurestris"; this may be A. dynica]

Nearctic. Exposed coastal and alpine *Empetrum* barrens; mixed coniferous woods.

Cape Raven 15Aug99♂; Point Riche 24Jul00♀♂.

Agyneta fabra (Keyserling, 1886)

Nearctic. Mixed coniferous woods.

Gander 00Aug98♂; Corner Brook 10Aug94♀.

Agyneta jacksoni (Braendegaard, 1937)

Nearctic. Mixed coniferous woods.

Lewis Hills 21Aug86° (CNC).

Agyneta olivacea (Emerton, 1882) [H; Argyneta cauta (O. P.-Cambridge, 1902)]

Holarctic. Mixed coniferous woods. Common.

Burnt Cape 00Aug03♀♀♂♂; Gander 1Jul78♀; Glide Lake 00Jul94♀♂; Savage Cove 14Jul01♂; TNNP 10Jun93♀♀♂.

Agyneta simplex (Emerton, 1926)

Nearctic. Exposed coastal Empetrum barrens.

New Ferolle 13Jul04 $\mbox{\ensuremath{\mbox{\scriptsize ?}}}$; Point Riche 19Aug00 $\mbox{\ensuremath{\mbox{\scriptsize 9}}}$; Burnt Cape 00Aug03 $\mbox{\ensuremath{\mbox{\scriptsize 9}}}$

Agyneta sp.

Not attributed to species (similar to CNC #6)

Mixed coniferous woods.

Main River west 00Jul98♂; Bakers Brook estuary 3Jul98♀.

Allomengea dentisetis (Grube, 1861) [H; Helophora ontariensis (Emerton, 1925)]

Holarctic. Exposed coastal Empetrum barrens.

New Ferolle 18Aug 00° $^{\circ}$; Sally's Cove 22Aug 00° $^{\circ}$; St. Lunaire 15Aug 00° .

Aphileta misera (O. Pickard-Cambridge, 1882) [H; Eulaira concava Chamberlin & Ivie, 1945]

Holarctic. Moist coniferous litter; coastal *Empetrum* barrens. Brunette Island [©] (CNC?).

Baryphyma kulczynskii (Eskov, 1979)

Holarctic. Mixed coniferous woods.

Pasadena 28May86♥, 16May88♥♂♂ (CNC).

Bathyphantes brevipes (Emerton, 1917) [H]

Nearctic. Mixed coniferous woods; stunted coniferous stands near coast; shrubs in road cuttings.

Big Brook $19Jun02^{\circ} \circ \sigma \sigma$; Nameless Cove $16Aug01^{\circ} \sigma$; Point Riche $1Aug99\sigma$; Port au Choix $13 Jul99\sigma$; Rocky Harbour $30Jul97\sigma$.

Bathyphantes brevis (Emerton, 1911) [H]

Nearctic. Litter around pools on Empetrum barrens.

Deer Lake 30May51 $^{\circ}$ (FMNH); South Branch (Codroy) 4Jul49 $^{\circ}$ (FMNH).

Bathyphantes canadensis (Emerton, 1882)

Holarctic. Mixed coniferous woods.

Georges Lake 13Sep88° (CNC); Pasadena 28May86° (CNC); Steady Brook 11Jun84° (CNC).

Bathyphantes concolor (Wider in Reuss, 1834) [H]

Holarctic. Mixed coniferous woods; thickets of alder and other shrubs; coastal *Empetrum* barrens; back of beaches; gardens and cultivated areas. Common.

Bakers Brook estuary 8-27Aug00°°; Mount Scio 00Aug95°; Port au Choix 1Aug99°°; Stanford River 29Jul99°; St. John's 2Apr00°°.

Bathyphantes gracilis (Blackwall, 1841) [H]

Holarctic. Peatlands and bogs.

Berry Head Pond (GMNP) 19-31Jul00 $^{\circ}$ $^{\circ}$ $^{\circ}$ $^{\circ}$; Burnt Cape 00Aug03 $^{\circ}$ $^{\circ}$ $^{\circ}$ $^{\circ}$.

Bathyphantes pallidus (Banks, 1892) [H; Bathyphantes sp. probably reprobus (Kulczyński, 1916)]

Nearctic. Mixed coniferous woods; coastal *Empetrum* barrens. Bakers Brook estuary 8-27Aug00°°°°; Burnt Cape 00Aug03°; base of Killdevil Mountain 13Aug00°°°.

Bathyphantes reprobus (Kulczyński, 1916).

Marusik et al. (1993) synonymised *B. crosbyi* (Emerton, 1919) under *B. reprobus*. CDD thinks the species are distinct and that Newfoundland specimens are *B. crosbyi*; see Buckle et al. 2001

Holarctic. Mixed coniferous woods.

Main River west 00Jul987.

Bathyphantes simillimus (L. Koch, 1879)

Holarctic. Mixed coniferous woods.

Berry Head Pond (GMNP) 31Jul-15Aug 00° ; Glide Lake $00Jul94^{\circ}$; Main River west $00Jul98^{\circ}$; Stanford River $29Jul99^{\circ}$.

Carorita limnaea (Crosby & Bishop, 1927)

Holarctic. Peatlands; mosses in mixed coniferous woods. Main River west 23Jul00♂.

Centromerita bicolor (Blackwall, 1833) [H; Centromerus bicolor (Blackwall)]

Palaearctic; introduced. Mixed coniferous woods; coastal *Empetrum* barrens.

Blackhead (St. John's) 7Oct-12Nov ♀♀♂♂.

Centromerus cornupalpis (O. Pickard-Cambridge, 1875) [H] Nearctic. Mixed coniferous woods.

Grand Bruit 13Jun49♀ (FMNH).

Centromerus denticulatus (Emerton, 1909)

Nearctic. Mixed coniferous woods; sphagnum bogs. Rocky Harbour (Bottom Brook bog) 6Aug989.

Centromerus furcatus (Emerton, 1882)

Nearctic. Mixed coniferous woods.

Berry Head Pond (GMNP) 26Jul-14Aug00°°; Cook's Pond 4-10Jul94°; Glide Lake 00Jul94°; Port au Choix 13Jul99°°.

Centromerus latidens (Emerton, 1882) [H]

Nearctic. Mixed coniferous woods.

Burgeo, Cow Head, Gambo, Grand Bruit, Millertown: 11-20Jun49°; 1-31Jul49°°; 1-31Aug49°° (FMNH?). Dates not connected to localities; year assumed 1949 from context (Hackman 1954). Not found by CDD in Hackman's collec-

tions in FMNH. This record may be erroneous but is retained here pending clarification.

Centromerus longibulbus (Emerton, 1882) [H]

Nearctic. Mixed coniferous woods; sphagnum bogs.

Berry Head Pond (GMNP) 31Jul-15Aug00°; Main River west 00Jul98°; Port au Choix 8Jul00°; TNNP 10Jun93°.

Centromerus persolutus (O. Pickard-Cambridge, 1875) [H] Nearctic. Mixed coniferous woods.

Corner Brook 10Aug94[♀]; Glide Lake 00Jul94[♂].

Centromerus sylvaticus (Blackwall, 1841) [H] Holarctic. Mixed coniferous woods.

Cow Head 10Aug49° (FMNH?); Grandy Brook 24Jun49° (FMNH?). Not found by CDD in Hackman's collections in FMNH. This record may be erroneous but is retained here pending clarification.

Ceraticelus alticeps (Fox, 1891)

Nearctic. Mixed coniferous woods.

Corner Brook 17Aug849 (CNC).

Ceraticelus atriceps (O. Pickard-Cambridge, 1874) [H]

Nearctic. Mixed coniferous woods. Common.

Bakers Brook estuary 15Jul99 $^{\circ}$; Big Brook 24Jun02 $^{\circ}$ $^{\circ}$; Burnt Cape 4Aug98 $^{\circ}$; Norris Point 28Jul98 $^{\circ}$ $^{\circ}$; Port au Choix 12Jul99 $^{\circ}$.

Ceraticelus bulbosus (Emerton, 1882)

Holarctic. Mixed coniferous woods.

Bay d'Espoir 11Jul85° (CNC); Brunette Island 18May85° (CNC); Eddies Cove (East or West not specified) 11Aug76° (CNC); Portland Creek 8Sep85° (CNC).

Ceraticelus fissiceps (O. Pickard-Cambridge, 1874) [H]

Nearctic. Mixed coniferous woods. Common.

Burnt Cape 00Aug03°, Cow Head 7Aug97°, Gander 28Jul98°, Port au Choix 12 Jul99°, Stanford River 28Jul99°.

Ceraticelus laetabilis (O. Pickard-Cambridge, 1874) [H] Nearctic. Mixed coniferous woods.

Glide Lake 00Jul94d.

Ceraticelus laetus (O. Pickard-Cambridge, 1874) Nearctic. Sphagnum bogs; mixed coniferous woods. Rocky Harbour (Bottom Brook bog) 20Aug99^o.

Ceraticelus minutus (Emerton, 1882)

Nearctic. Mixed coniferous woods.

Gambo Pond 29Oct85° (CNC); Highlands River 14Aug84° ° ° (CNC); New Bay Pond 14Aug84° (CNC); Pasadena 19Jul84° (CNC); Triton Brook 29Oct85° ° (CNC).

Ceraticelus similis (Banks, 1892) [H]

Nearctic. *Empetrum* barrens; mixed coniferous woods. Shallow Bay 9Aug980.

Ceratinella brunnea Emerton, 1882 [H]

Nearctic. Mixed coniferous woods; *Empetrum* barrens; sphagnum bogs. Common.

Big Brook 16Jul01°; Blackhead (St. John's) 21Apr99°; Burnt Cape 00Aug03°♂; Norris Point 22Jul00♂; Port au Choix 1Aug99°.

Ceratinella ornatula (Crosby & Bishop, 1925)

Nearctic. Mixed coniferous woods.

Hampden 29Jun77[♀] (CNC).

Ceratinella parvula (Fox, 1891)

Nearctic. Mixed coniferous woods; rocky barrens.

Eddies Cove East 21Jun00°; Main River west 00Jul98°.

Ceratinops annulipes (Banks, 1892)

Nearctic. Sphagnum bogs.

Rocky Harbour (Bottom Brook bog) 13Aug989.

Ceratinopsis nigriceps Emerton, 1882 Nearctic. Mixed coniferous woods.

Badger 30Jul57[♀] (CNC); Gander 14Jul78[♂] (CNC).

Ceratinopsis nigripalpis Emerton, 1882 Nearctic. Mixed coniferous woods.

Gallows Cove 2Nov97♥.

Cheniseo sphagnicultor Bishop & Crosby, 1935

Nearctic. Sphagnum bogs.

Rocky Harbour (Bottom Brook bog) 13Aug999.

Dicymbium elongatum (Emerton, 1882) Nearctic. Mixed coniferous woods.

Main River west 24Jul00°.

Dicymbium nigrum (Blackwall, 1834)

Palaearctic; introduced. Mixed coniferous woods; shrubs in abandoned meadows; shrubs and trees in gardens. These are the only known North American records.

Gallows Cove 2Nov979 of (and CNC); St. John's (Forest Avenue) 18Apr990; St. John's (University) 26Sep999.

Dietrichia hesperia Crosby & Bishop, 1933 [H]

Nearctic. Mixed coniferous woods.

Stephenville 29Oct47° (AMNH?). This record is based on a single male collected by Robert Traub and lent to Hackman by Dr. W. J. Gertsch. Hackman (1954) discussed whether the Newfoundland specimen was conspecific with a paratype (pages 17, 18) and put a question mark by this species in his checklist (page 6). It is assumed that Hackman returned the specimen to the AMNH. This record may be erroneous but is retained here pending clarification.

Diplocentria bidentata (Emerton, 1882) [H]

Holarctic. Mixed coniferous woods; shrubs; sphagnum bogs; *Empetrum* barrens; abandoned meadows; gardens. Common. Berry Head Pond (GMNP) 4Aug99°; Big Brook 19Jun02°; Lobster Cove 22Jul99°; Norris Point 28Jul98°; Point Riche 1Aug99°.

Diplocentria rectangulata (Emerton, 1915)

Holarctic. Mixed coniferous woods.

Main River west 00Jul98♂.

Diplocephalus cristatus (Blackwall, 1833) [H]

Holarctic. Mixed coniferous woods.

Port au Choix 13Jul99d.

Diplocephalus subrostratus (O. Pickard-Cambridge, 1873) [H; Diplocephalus cuneatus (Emerton, 1909)]

Holarctic. Mixed coniferous woods.

Lloyds River 19Jun84 $^{\circ}$ $^{\circ}$ $^{\circ}$ (CNC); Millertown 20Aug84 $^{\circ}$ $^{\circ}$ (CNC); Pasadena 23May88 $^{\circ}$ $^{\circ}$ (CNC); Point Leamington 24Sep84 $^{\circ}$ (CNC).

Dismodicus alticeps Chamberlin & Ivie, 1947 [H]

Holarctic. Mixed coniferous woods.

Noel Paul's Brook 8Jul77^o (CNC).

Dismodicus decemoculatus (Emerton, 1882) [H; Dismodicus bifrons decemoculatus (Emerton)]

Nearctic. Coastal *Empetrum* barrens; litter and rocks at back of beaches.

Big Brook $22Jun02^{\circ} \circ {}^{\circ} \circ {}^{\circ}$; Port au Choix $5Jul04^{\circ}$; Sally's Cove $21Jul00^{\circ}$; St. Lunaire $15Aug00^{\circ} \circ {}^{\circ}$; Watts Point $29Jul98^{\circ}$.

Drapetisca alteranda Chamberlin, 1909 Nearctic. Mixed coniferous woods.

St. John's 0000229 (CNC).

Entelecara sombra (Chamberlin & Ivie, 1947)

Holarctic. *Empetrum* barrens at higher elevations and on tops of mountains; rocky coastal barrens in exposed places.

Big Brook 25Jun02°°; Conche 27Jul04°; Highlands of St. John 14Aug00°; Killdevil Mountain 26Jul99°°; Point Riche 24Jul00°°.

Eperigone bryantae Ivie & Barrows, 1935

Nearctic. Mixed coniferous woods.

Renews 28Jul729 (CNC).

Eperigone entomologica (Emerton, 1911)

Nearctic. Sphagnum bogs; mixed coniferous woods.

Bakers Brook estuary 14Jul98 \circ ; Rocky Harbour (Bottom Brook bog) 12Aug98 \circ σ ; Main River west 00Jul98 σ .

Eperigone index (Emerton, 1914)

Nearctic. Sphagnum bogs; mixed coniferous woods.

Fermeuse 17Oct85° (CNC).

Eperigone maculata (Banks, 1892) [H]

Holarctic. Mixed coniferous woods.

Gander 17Jul78♂♂; Little Grand Lake 27Jul94♂.

Eperigone trilobata (Emerton, 1882) [H]

Holarctic. Coastal Empetrum barrens; mixed coniferous woods. Blackhead (St. John's) 16Oct 01° .

Eperigone undulata (Emerton, 1914) [H; Eperigone contorta (Emerton, 1882)]

Nearctic. Coastal *Empetrum* barrens; mixed coniferous woods. Bakers Brook estuary 9Aug99°; Main River west 00Jul98°.

Eridantes utibilis Crosby and Bishop, 1933 [H; Scylaceus obtusus Emerton, 1915]

Nearctic. Mixed coniferous woods.

Corner Brook 25Jul92 $^{\circ}$; Squid Cove road 19Jul98 $^{\circ}$; Port au Choix 24Jun00 $^{\circ}$.

Erigone aletris (Crosby & Bishop, 1928) [H; Erigone ephala Crosby & Bishop, 1928]

Holarctic. Mixed coniferous woods; sphagnum bogs; litter, stones and low herbs at back of beaches; *Empetrum* barrens. Bakers Brook estuary 13Sep97°; Cape Freels 12Jul01°°; New Ferolle 10Aug00°°°; Savage Cove 30Jun03°°; Seal Cove (Bonne Bay) 14Jul98°.

Erigone atra Blackwall, 1833 [H]

Holarctic. Mixed coniferous woods.

Pasadena 28May86여여 (CNC).

Erigone blaesa Crosby & Bishop, 1928 [H]

Nearctic. Litter at back of beaches; litter around lakes; sand dunes.

Brunette Island 14Jul94 $^{\circ}$; Cape Freels 12 Jul01 $^{\circ}$ $^{\circ}$ $^{\circ}$; Western Brook Pond $^{\circ}$ $^{\circ}$.

Erigone dentigera (O.Pickard-Cambridge, 1874) [H]

Holarctic. Mixed coniferous woods; abandoned meadows; sphagnum bogs.

Big Brook 24Jun02°; Gadds Harbour 28Jul99°; Main River west 29Jul00°.

Erigone dentipalpis (Wider in Reuss, 1834)

Palaearctic; introduced. Coastal *Empetrum* barrens; mixed coniferous woods; gardens.

Blackhead (St. John's) 25Jul03°; Main River west 25Jul00°°; St. John's 4Oct02°.

Erigone ephala Crosby & Bishop, 1928 [H]

Nearctic. Mixed coniferous woods; back of beaches.

Berry Hill (GMNP) 29Jul76 $^{\circ}$ (CNC); Brunette Island 7-8May86 $^{\circ}$ (CNC); Chance Cove 25Jun85 $^{\circ}$ $^{\circ}$ $^{\circ}$ $^{\circ}$ (CNC); Eastport 7Aug76 $^{\circ}$ (CNC); Stephenville 30Mar87 $^{\circ}$ (CNC). Buckle et al. (2001) say "probably = *E. aletris*". Retained here pending clarification.

Erigone mentasta Chamberlin and Ivie, 1947 [H; female *Hilaira mentasta* (Chamberlin and Ivie); male a misidentification of *Sciastes dubius* (Hackman, 1954)]

Nearctic. Mixed coniferous woods.

Lomond 14Jul499 (FMNH).

Erigone whymperi O. Pickard-Cambridge, 1877 [H]

Nearctic. Mixed coniferous woods; Empetrum barrens.

Cooks Harbour 16Jul49° (FMNH); Doctors Hill (= Highlands of St. John, Port au Choix, not Doctor's Hill, Port Blandford) 29Jun49° (FMNH); Flowers Cove 25Jul49° (FMNH); Hare Bay 14Jul49° (FMNH); Waterford Bridge 5Jun49° (FMNH). These records of an essentially arctic species (Buckle et al. 2001) seem surprising. Hackman (1954, pages 18, 58) adds a question mark to his identification. Retained here pending clarification.

Estrandia grandaeva (Keyserling, 1886) [H]

Holarctic. Mixed coniferous woods.

Berry Head Pond (GMNP) 24Jul99♂; Lomond 12Aug93勺; Port au Choix 12Jul99♂; Shallow Bay 13Jul97♀♀ (and CNC); Western Brook Pond 5Jul99♀♀ (and CNC).

Eulaira microtarsus (Emerton, 1882) [H]

Nearctic. Mixed coniferous woods.

Corner Brook 24Jul92 $^{\circ}$; Glide Lake 00Jul94 $^{\circ}$ $^{\circ}$ $^{\circ}$; Main River west 00Jul98 $^{\circ}$ $^{\circ}$.

Floricomus rostratus (Emerton, 1882)

Nearctic. Mixed coniferous woods.

Main River west 00Jul98♂.

Glyphesis scopulifer (Emerton, 1882) [H; Tapinocyba scopuliferum (Emerton)]

Nearctic. Mixed coniferous woods; edges of waterways. Cow Head 8Jul49° (FMNH).

Gnathonaroides pedalis (Emerton, 1923)

Nearctic. Mixed coniferous woods.

Corner Brook 25Jul92[♀]; Corner Brook 14Jun93[♂].

Gonatium crassipalpum Bryant, 1933

Nearctic. Coastal rocky barrens; *Empetrum* barrens; sphagnum bogs.

Berry Head Pond (GMNP) 19Jul00°; Logy Bay 20Nov03°; Point Riche 13Jul99°; St. Lunaire 15Aug00°; Table Point 30Sep98°.

Grammonota angusta Dondale, 1959 [H; *Grammonota pictilis* (O. Pickard-Cambridge, 1875)]

Nearctic. Mixed coniferous woods; low vegetation in clearings in woods. Common.

Gadds Harbour 27Jul97 $^{\circ}$ $^{\circ}$; Gallows Cove 10Aug99 $^{\circ}$ $^{\circ}$; Gander 28Jul98 $^{\circ}$ $^{\circ}$; Port au Choix 8Jul00 $^{\circ}$; Stuckless Pond 20Jul93 $^{\circ}$.

Grammonota capitata Emerton, 1924 [H; Grammonota pictilis (O. Pickard-Cambridge, 1875) in part]

Nearctic. Mixed coniferous woods.

South Branch (Codroy) 3Jul49 $^{\circ}$ (FMNH); Spruce Brook River 8-9Jul49 $^{\circ}$ $^{\circ}$ (FMNH); Victoria Lake 13Jun51 $^{\circ}$ (FMNH).

Grammonota gigas (Banks, 1896) [H]

Nearctic. Mixed coniferous woods; sphagnum bogs.

Bakers Brook estuary 14Jul98 $^{\circ}$ $^{\circ}$; Rocky Harbour (Bottom Brook bog) 13Aug98 $^{\circ}$; Main River west 00Jul98 $^{\circ}$ $^{\circ}$; Mount Scio 00Aug95 $^{\circ}$.

Grammonota maritima Emerton, 1925 [H]

Nearctic. Empetrum barrens; rocky coastal barrens.

Burnt Cape 00Aug03♀♂.

Grammonota vittata Barrows, 1919

Nearctic. Low vegetation in and around sphagnum bogs. Rocky Harbour (Bottom Brook bog) 16Jul99^o.

Halorates alascensis (Banks, 1900) [H; Collinsia clypiella (Chamberlin, 1920)]

Nearctic. Salt marshes; wet Empetrum barrens.

Cow Head 10Aug49° (FMNH?); Deer Lake 30May51°°° (FMNH?). Not found by CDD in Hackman's collections in FMNH. This record may be erroneous but is retained here pending clarification.

Halorates holmgrenii (Thorell, 1871)

Holarctic. Exposed coastal barrens.

Big Brook 19Jun02♥.

Halorates palmeni (Hackman, 1954) [H; Collinsia palmeni Hackman]

Known only from a single female reported by Hackman (1954) Nearctic. River bank.

South Branch (Codroy) 2Jul49° (CNC).

Note: CDD and J. Redner examined this specimen and think it is *Oedothorax maximus* (Emerton); this question will be dealt with elsewhere.

Halorates pertinens (O. Pickard-Cambridge, 1875) [H; Collinsia pertinens O. Pickard-Cambridge]

Nearctic. Among stones and litter at the back of beaches. Big Brook 18Jun02° od; Gadds Harbour 11Aug99°.

Helophora insignis (Blackwall, 1841) [H]

Holarctic. Mixed coniferous woods.

Bakers Brook estuary 27Aug00°.

Hilaira canaliculata (Emerton, 1915) [H; Hilaira aquilonia Hackman, 1954]

Holarctic. In litter and moss in thickets of shrubs.

Stanford River 11Aug49 ♀ (CNC).

Hilaira herniosa (Thorell, 1875) [H]

Holarctic. Exposed coastal Empetrum barrens.

Raleigh 17Jul489 (FMNH).

Hybauchenidium gibbosum (Sørensen, 1898) [H; Hybocoptus denticulatus (Emerton, 1915)]

Nearctic. Mixed coniferous woods.

Main River west 00Jun98 $^{\circ}$ $^{\circ}$.

Hypomma marxii (Keyserling, 1886) [H]

Nearctic. Empetrum barrens; sphagnum bogs.

Cow Head 11Aug49° (FMNH); South Branch (Codroy) 2Jul49° (FMNH); Victoria Lake 11Jun51°° (FMNH).

Islandiana flaveola (Banks, 1892)

Nearctic. Mixed coniferous woods.

Main River west 31Jul00♂.

Islandiana holmi Ivie, 1965 [H; Islandiana alata (Emerton, 1919)]

Nearctic. Empetrum and rocky barrens at the coast and higher altitudes.

Bartletts Harbour 12Jul04\varphi; Port au Choix 5 Jul04\varphi.

Islandiana princeps Braendegaard, 1932 [H; Islandiana alata (Emerton, 1919)]

Nearctic. Sphagnum bogs; Empetrum barrens.

Big Brook 22Jun02♂; Burnt Cape 00Aug03♀♂; Sally's Cove bog 27Jul99♂.

Kaestneria pullata (O. Pickard-Cambridge, 1863) [H; Bathy-phantes pullatus (O. Pickard-Cambridge)]

Holarctic. Shrubs and herbs in mixed coniferous woods; shrubs and herbs in road cuttings.

Bellburns 8Jul97°; Port au Choix 20Jul99°; Sally's Cove 31Jul-15Aug00°; Shallow Bay 9Aug98°; TNNP 10Jun93°.

Kaestneria rufula (Hackman, 1954) [H; Bathyphantes rufulus Hackman]

Nearctic. Sphagnum bogs.

Bakers Brook estuary 3Jul989.

Lepthyphantes alpinus (Emerton, 1882) [H]

Holarctic. Mixed coniferous woods.

Gander $20Jul98\circ \circ \circ$; Killdevil Mountain $20Jul00\circ \circ \circ \circ \circ$; Norris Point $27Jul98\circ$; Point Riche $1Aug99\circ \circ \circ \circ$; Port au Choix $1Aug99\circ \circ \circ$; Stanford River $29Jul99\circ \circ \circ \circ \circ \circ \circ$

Lepthyphantes bihamatus (Emerton, 1882) [H]

Nearctic. Mixed coniferous woods; low herbs in clearings in woods.

Berry Head Pond (GMNP) 4Aug99°; Lobster Cove 22Jul99°; Norris Point 14Aug00°; Port au Choix 12Jul99°; Shallow Bay 13Jul97°.

Lepthyphantes calcaratus (Emerton, 1909) [H]

Nearctic. Mixed coniferous woods; stunted trees near coast; sea-cliffs.

Berry Head Pond (GMNP) $24Jul99^{\circ}$; Green Gardens $00Aug92^{\circ}$; base of Killdevil Mountain $20Jul00^{\circ}$; Lobster Cove $9Aug99^{\circ}$; Point Riche $24Jul98^{\circ}$.

Lepthyphantes complicatus (Emerton, 1882) [H; Lepthyphantes umbraticola (Keyserling, 1886)]

Holarctic. Mixed coniferous woods; coastal rocky and *Empetrum* barrens.

Big Brook $19Jun99^{\circ}\sigma$; Nameless Cove $16Aug01^{\circ}$; Point Riche $13Jul99\sigma$; Port au Choix $1Aug99\sigma$; Savage Cove $23Aug98^{\circ}$.

Lepthyphantes cracens Zorsch, 1937. [H; Lepthypantes nigriventris (L. Koch, 1879)]

Nearctic. Mixed coniferous woods.

Previously reported only from New York State (Buckle et al. 2001) and Quebec (Paquin & Dupérré 2003 as *Tenuiphantes*) on the basis of males. Both males and females have been found in Newfoundland, and the female has been described elsewhere (Pickavance 2004). The female is similar to *L. nigriventris* (L. Koch, 1879), and likely Hackman's (1954) report of a single female of this Palaearctic species from Newfoundland was a misidentification of a specimen of *L. cracens*. We feel that *L. nigriventris* probably does not occur in North America.

Port au Choix 2-11Aug 00° $^{\circ}$ $^{\circ}$ $^{\circ}$, 20Aug 00° $^{\circ}$ $^{\circ}$ $^{\circ}$ (and CNC).

Lepthyphantes duplicatus (Emerton, 1913) [H; Lepthyphantes triramus Chamberlin & Ivie, 1947]

Nearctic. Mixed coniferous woods.

Bakers Brook estuary 8-27Aug $^{\circ}$ °; Little Grand Lake 6Aug 94 $^{\circ}$; Norris Point 15Aug 00° ; Port au Choix 8-24Jul 00° .

Lepthyphantes intricatus (Emerton, 1911)

Nearctic. Mixed coniferous woods.

Main River west 00Jul98♂.

Lepthyphantes leprosus (Ohlert, 1865) [H]

Palaearctic; introduced. Mixed coniferous woods; sea cliffs; houses and outbuildings.

Blackhead (St. John's) 12Nov02°; Mt. Scio 8Oct99°; Port au Choix 1Oct98°; St. John's 2Nov02°; Tuckers Head 3Oct98°.

Lepthyphantes tenuis (Blackwall, 1852)

Palaearctic; introduced. Coastal *Empetrum* barrens near human settlements.

Blackhead (St. John's) 12Nov02♂♂; Logy Bay 16Sep03♀.

Lepthyphantes turbatrix (O. Pickard-Cambridge, 1877) [H; Lepthyphantes subalpinus (Emerton, 1882)]

Nearctic. Mixed coniferous woods; stones at the back of beaches; sea cliffs; talus slopes.

Boutitou 17Jul03°; Conche 16Jul03°°; Gander 26Jul98°; Lomond 12Aug93°; Tuckers Head 30Jul97°°°.

Lepthyphantes washingtoni Zorsch, 1937

Nearctic. Rocky or Empetrum barrens; mixed coniferous woods.

Big Brook 20-25Jun03 $^{\circ}$ $^{\circ}$; Main River west 00Jul00 $^{\circ}$; Nameless Cove 16Aug01 $^{\circ}$; Point Riche 25Jun00 $^{\circ}$; Port au Choix 3-11Aug $^{\circ}$ $^{\circ}$.

Lepthyphantes zebra (Emerton, 1882) [H]

Nearctic. Mixed coniferous woods.

Logy Bay 6Oct02♀.

Lepthyphantes spp.

Two unidentified species. In CNC as *Lepthyphantes* #2, *Lepthyphantes* #7.

Nearctic. Mixed coniferous woods.

#2 Berry Head Pond (GMNP) 24Jul99\(^\) (and CNC); #7 Glide Lake 00Jul94\(^\sigma\); Main River west 1Aug00\(^\) (and CNC).

Lophomma sylvaticum (Emerton, 1913) [H; a specimen of this species labelled *Entelecara* is in Hackman's material in FMNH, but is not recorded in his list of species]

Nearctic. Mixed coniferous woods.

Main River west 00Jul98♀♂.

Maro amplus Dondale & Buckle, 2001

Nearctic. Mixed coniferous woods; shrubs and herbs in clearings in woods.

Corner Brook 24Jul92°; Main River west 17Jun98°°; Mt. Scio 00Aug95° (and CNC); Glide Lake 00Jul94°°.

Maro nearcticus Dondale & Buckle, 2001

Nearctic. Mixed coniferous woods.

Little Grand Lake 15Jul92 $^{\circ}$, 13Jul93 $^{\circ}$ $^{\circ}$; Main River west 27Jul00 $^{\circ}$; Stanford River 29Jul99 $^{\circ}$.

Maso sundevallii (Westring, 1851) [H]

Holarctic. Mixed coniferous woods.

Main River west 00Jul98♂.

Mecynargus paetulus (O. Pickard-Cambridge, 1875).

Holarctic. Coastal subarctic barrens.

Nameless Cove16Aug01[♀]; Savage Cove 30Jun03[♀].

Micrargus longitarsus (Emerton, 1882)

Nearctic. Mixed coniferous woods.

Corner Brook 7Aug93o.

Microlinyphia mandibulata (Emerton, 1882) [H; Pusillia mandibulata Emerton]

Nearctic. Coastal *Empetrum* barrens; moist abandoned meadows.

Badger 24Jun80°; Blackhead (St. John's) 10Jun01°; Logy Bay 6Aug01°; Main River west 14Aug00°.

Mythoplastoides exiguus (Banks, 1892) [H; Entelecara exigua (Banks)]

Nearctic. Sphagnum bogs.

Pushthrough 24Jun49° (FMNH?). Not found by CDD in Hackman's collections in FMNH. This record may be erroneous but is retained here pending clarification.

Neriene clathrata (Sundevall, 1830) [H; Linyphia waldea

Chamberlin & Ivie, 1943] Holarctic. Mixed coniferous woods; coastal abandoned meadows; shrubs in road cuttings.

Bay Bulls 1May96°; Blackhead (St. John's) 9Jun03°; Gander 28Jul98°; Gros Morne Mountain 16Jun94°; Norris Point 7Jul00°.

Neriene radiata (Walckenaer, 1841) [H; Linyphia marginata C. L. Koch, 1834]

Holarctic. Mixed coniferous woods; sea cliffs; shrubs in road cuttings.

Gander 28Jul98°°; Rocky Harbour 30Jul97°; Tuckers Head 30Jul97°.

Oedothorax trilobatus (Banks, 1896)

Nearctic. Mixed coniferous woods; sphagnum bogs; rocky barrens

Bakers Brook estuary $^{\circ}$; Berry Head Pond (GMNP) 22Aug 00° ; Rocky Harbour (Bottom Brook bog) 23Jul99 $^{\circ}$; Eddies Cove East 21Jun00 $^{\circ}$; Main River west 20Jul00 $^{\circ}$.

Oreonetides flavescens (Crosby, 1937) [H]

Nearctic. Sphagnum bogs.

Rocky Harbour (Bottom Brook bog) 5Aug989.

Oreonetides rectangulatus (Emerton, 1913)

Nearctic. Sphagnum bogs.

Berry Head Pond (GMNP) 15-22Aug00°°°°; Rocky Harbour (Bottom Brook bog) 23Jul-20Aug99°°; Sally's Cove 6-21Jul00°°.

Oreonetides rotundus (Emerton, 1913) [H; Diplocentria corynetes Chamberlin & Ivie, 1945]

Nearctic. Mixed coniferous woods.

Gallows Cove 2Nov97°; Glide Lake 00Aug94°; Main River west 00Jul98°; Norris Point 28Jul98°.

Oreonetides vaginatus (Thorell, 1872) [H]

Holarctic. Mixed coniferous woods.

Glide Lake 00Aug96♀♂; Main River west 00Jul98♂; Port au Choix 8Jul00♂.

Oreonetides spp.

Two unidentified species. In CNC as *Oreonetides* #1 and *Oreonetides* #2

Nearctic. Mixed coniferous woods.

#1 Norris Point 28Jul
98 $^{\circ}$, 20Jun-13Jul00 $^{\circ}$ $^{\circ}$; #2 Glide Lake 00Aug
96 $^{\circ}$.

Oreophantes recurvatus (Emerton, 1913)

Nearctic. Mixed coniferous woods.

Bakers Brook estuary 8-27Aug 00° °; Berry Head Pond (GMNP) 26Jul00°; Glide Lake 00Aug96°; Little Grand Lake 27Jul94°.

Pelecopsis mengei (Simon, 1884) [H; Trichopterna mengei (Simon)]

Holarctic. Mixed coniferous woods.

Burnt Cape 00Aug03; Main River west 00Jul98ç♂.

Pityohyphantes costatus (Hentz, 1850) [H; Pityohyphantes costata Hentz]

Nearctic. Mixed coniferous woods.

Deer Lake 3Jun51° (FMNH); Hare Bay 21Jun49° (FMNH); Lomond 14Jul49° (FMNH); Rencontre 17-19Jun49° (FMNH); Spruce Brook 8-9Jul49° (FMNH).

Pityohyphantes limitaneus (Emerton, 1915)

Nearctic. Mixed coniferous woods.

Berry Head Pond (GMNP) 29Jun00 $^{\circ}$ $^{\circ}$ $^{\circ}$; Lomond 14Jul98 $^{\circ}$ $^{\circ}$; Millbrook (Rocky Harbour) 4Aug97 $^{\circ}$ $^{\circ}$.

Pityohyphantes subarcticus Chamberlin & Ivie, 1943 [H; Pityohyphantes costata Hentz, 1850]

Nearctic. Mixed coniferous woods; rocky barrens.

Bakers Brook estuary $8-27 \text{Aug}00^{\circ} \circ$; Eddies Cove East $21 \text{Jun}00^{\circ} \circ$; Gander $28 \text{Jul}08^{\circ} \circ$; Main River west $28 \text{Jul}00^{\circ} \circ \circ$; Port au Choix $24 \text{Jul}00 \circ$.

Pocadicnemis americana Millidge, 1976

Nearctic. Mixed coniferous woods; rocky barrens; stones and litter at back of beaches.

Bakers Brook estuary $6Aug99^{\circ}$; Burnt Cape $00Aug03^{\circ}$; Gander $28Jul98^{\circ}$; Little Grand Lake $22Aug94^{\circ}$; Mt. Scio $00Aug95^{\circ}$.

Poeciloneta furcata (Emerton, 1913)

Nearctic. Mixed coniferous woods.

Little Grand Lake 24Aug93♂.

Poeciloneta sp.

Unidentified species. NF 017 male and NF 108 female.

Nearctic. Mixed coniferous woods.

NF017 Corner Brook 19Jul-17Aug93° (CNC); NF108 Corner Brook 10-23Aug94° (CNC).

Porrhomma gertschi Hackman, 1954 [H]

Nearctic. Mixed coniferous woods.

Known only from Newfoundland.

Deer Lake 30May51 ♀♂ (CNC).

Porrhomma terrestre (Emerton, 1882)

Nearctic. Mixed coniferous woods. Berry Head Pond (GMNP) 16Aug99°, 26Jul-4Aug00°; Corner Brook 14Jun-6Jul93°°, 19Jul-17Aug93°; base of

Killdevil Mountain 20Jul00♀.

Porrhomma sp.

Unidentified species: Porrhomma sp. #1

Nearctic. Mixed coniferous woods.

Glide Lake 00Jul94♥; Corner Brook 25Jul92♥.

Satilatlas gertschi Millidge, 1981

Nearctic. Exposed coastal barrens.

Burnt Cape 00Jul03♂.

Satilatlas marxii Keyserling, 1886

Holarctic. Mixed coniferous woods; *Empetrum* barrens.

Burnt Cape 00Jul03 $^{\circ}$ $^{\circ}$; Eddies Cove East 21Jun00 $^{\circ}$ $^{\circ}$; Main River west 00Jul98 $^{\circ}$.

Sciastes dubius (Hackman, 1954) [H; Hilaira dubia Hackman] Holarctic. Mixed coniferous woods; damp moss.

Grandy Brook 26Jun49° (FMNH); Rose Blanche 27Jun49° (FMNH); St. Barbe 26Jul49° (FMNH); Stanford River 11Aug49° (CNC); Victoria Lake 11- 13Jun51° (FMNH).

Sciastes truncatus (Emerton, 1882) [H]

Nearctic. Mixed coniferous woods.

Gander 28Jun98°; Glide Lake 00Jul94°; Main River west 00Jul98°; Norris Point 27Jul98°, 26Jul00°°.

Scirites pectinatus (Emerton, 1911) [H; Tapinocyba exigua Hackman, 1954]

Nearctic. Mixed coniferous woods; birch stands. Millertown Junction 22Aug49° (CNC).

Scironis tarsalis (Emerton, 1911) [H]

Nearctic. Mixed coniferous woods; alder thickets. Little Grand Lake 27Jul94.

Scotinotylus pallidus (Emerton, 1882)

Nearctic. Sphagnum bogs; Empetrum barrens.

Baie Verte Peninsula 22Oct85° (CNC); Main River 16Aug85° ° ° (CNC); Pasadena 13, 19Jul84° ° ° ° (CNC); Pinchgut Lake 17Aug84° (CNC); Plumb (=Plum) Point 18Oct85° (CNC).

Scotinotylus sacer (Crosby, 1929)

Holarctic. Mixed coniferous woods; sphagnum bogs. Gander 28Jun98°; Glide Lake 00Jul94°; Main River west 00Jul98°; Norris Point 27Jul98°, 27Jun-26Jul00°°°.

Scyletria inflata Bishop & Crosby, 1938

Nearctic. Mixed coniferous woods.

Main River west 22Jul00°; Burnt Cape 00Aug03°.

Semljicola obtusus (Emerton, 1915)

Nearctic. Mixed coniferous woods; *Empetrum* barrens. Main River west 22Jul00°; Burnt Cape 00Aug03°.

Sisicottus montanus (Emerton, 1882) [H]

Nearctic. Mixed coniferous woods. Common.

Berry Head Pond (GMNP) 27Jul-16Aug99° ♂; Big Brook 22-24Jun02° ♂; Gander 1Jul78°; Lobster Cove 20Aug99 ° ♂; Port au Choix 1Aug99 ♂.

Sisicottus quoylei Miller, 1999

Nearctic. Mixed coniferous woods.

Logy Bay 11Jul02°; Long Pond (St. John's) 10Jan99°°; Main River west 00Jul98°.

Sisicus apertus (Holm, 1939)

Holarctic. Mixed coniferous woods.

Bakers Brook estuary 8-27Aug 00° °; Corner Brook 25Jul 92° °; Glide Lake 00Jul94°.

Sisicus penifusifer Bishop & Crosby, 1938

Nearctic. Sphagnum bogs.

Rocky Harbour (Bottom Brook bog) 13Jul989.

Sisis rotundus (Emerton, 1925)

Nearctic. Mixed coniferous woods.

Glide Lake 00Jul94♂; Main River west 00Jul98♀♂.

Souessa spinifera (O. Pickard-Cambridge, 1874) [H]

Nearctic. Mixed coniferous woods.

Grandy Brook, Cow Head, Stanford River, Gambo: 21-30Jun49°; 21-31Jul49°; 1-31Aug49° (FMNH?). Dates not connected to localities; year assumed 1949 from context (Hackman 1954). Not found by CDD in Hackman's collections in FMNH. This record may be erroneous but is retained here pending clarification.

Sougambus bostoniensis (Emerton, 1882) [H; Hilaira algida Hackman, 1954]

Nearctic. Mixed coniferous woods.

Grand Bruit 13Jun49 $^{\circ}$ (FMNH and CNC); Lomond 15Jul49 $^{\circ}$ (FMNH).

Soulgas corticarius (Emerton, 1909)

Nearctic. Mixed coniferous woods; litter at back of beaches. Bakers Brook estuary $27Aug98^{\circ}$.

Stemonyphantes blauveltae Gertsch, 1951

Nearctic. Mixed coniferous woods; *Empetrum* barrens. Cupids 5Sep99°; Logy Bay 11Nov02°; Long Pond (St. John's) 12May80°; Mt. Scio 00Aug95°; St. John's 21Feb99°. Styloctetor stativus (Simon, 1881) [H; Spirembolus oreinoides Chamberlin, 1948]

Nearctic. Mixed coniferous woods. Kittys Brook 18Aug49° (FMNH?).

Not found by CDD in Hackman's collections in FMNH. This record may be erroneous but is retained here pending clarification

Tapinocyba bicarinata (Emerton, 1913)

Nearctic. Mixed coniferous woods.

Burnt Cape 00Aug03©; Main River west 00Jul98©.

Tapinocyba flagellata (Emerton, 1911)

Nearctic. Mixed coniferous woods.

Grandys Lake north 20Sep84° (CNC); Barachois Brook 15Aug84° (CNC).

Tapinocyba lindrothi Hackman, 1954 [H]

Nearctic. Mixed coniferous woods.

South Branch (Codroy) 3Jul49

(CNC).

Tapinocyba minuta (Emerton, 1909)

Nearctic. Alpine *Empetrum* barrens; sphagnum bogs. Burnt Cape 00Aug03°°°°; Killdevil Mountain 17Aug99°°°; Point Riche 24Jul00°; Sally's Cove 27Jul99°.

Tapinocyba simplex (Emerton, 1882) [H]

Nearctic. Mixed coniferous woods.

Bakers Brook estuary 8-27Aug00°°; Glide Lake 00Jul94°°; Lobster Cove 21Aug98°; Stanford River 29Jul99°°.

Tapinopa bilineata Banks, 1893

Nearctic. Litter at back of beach.

Bakers Brook estuary $8\text{-}27Aug^{\circ}$; Blackhead (St. John's) $12Nov02^{\circ}$; Green Point $26Aug98^{\circ}$.

Tennesseellum formicum (Emerton, 1882)

Nearctic. Mixed coniferous woods.

Main River west 31 Jul00♂; Norris Point 11Aug99♀.

Thyreosthenius parasiticus (Westring, 1851) [H]

Holarctic. Mixed coniferous woods. Norris Point 28Jun-22Jul00♀♂.

Tiso vagans (Blackwall, 1834)

Palaearctic; introduced. Coastal Empetrum barrens.

Blackhead (St. John's) 31May02° ♂.

Tunagyna debilis (Banks, 1892) [H]

Holarctic. Mixed coniferous woods; *Empetrum* barrens; shrubs at lower elevations of mountains.

Big Brook 25Jun02 $^{\circ}$ $^{\circ}$ $^{\circ}$; Blackhead (St. John's) 21Apr99 $^{\circ}$; Nameless Cove 16Aug01 $^{\circ}$ $^{\circ}$; Port au Choix1Aug99 $^{\circ}$; Table Point 23Jul97 $^{\circ}$.

Typhocrestus pygmaeus (Sørensen, 1898)

Nearctic. Exposed coastal barrens.

Burnt Cape 00Jul03 .

Vermontia thoracica (Emerton, 1913)

Holarctic. Mixed coniferous woods.

Main River west 00Jul98♀♂.

Wabasso cacuminatus Millidge, 1984

Holarctic. Mixed coniferous woods.

Main River west 00Jul98♂.

Wabasso quaestio (Chamberlin, 1949)

Holarctic. Mixed coniferous woods; rocky coastal barrens. Big Brook 21Jun02♂; Burnt Cape 00Aug03♀♂; Main River west 00Jul98♂♂.

Walckenaria arctica Millidge, 1983 [H; Oedothorax montiferus (Emerton, 1882)]

Nearctic. Mixed coniferous woods.

Bakers Brook estuary 8-27Aug 00° °; Berry Head Pond (GMNP) 27Jul 99° ; Glide Lake 00Jul 94° .

Walckenaria atrotibialis (O. Pickard-Cambridge, 1878) [H; Entelecara abrupta (Emerton, 1909)]

Holarctic. Mixed coniferous woods.

Bakers Brook estuary 8-27Aug00°°; Berry Head Pond (GMNP) 28Jul99°; Norris Point 26Jul-14Aug00°°; Port au Choix 1Aug99°; Sally's Cove 31Jul00°.

Walckenaeria auranticeps (Emerton, 1882) [H; Cornicularia auranticeps Emerton, 1882]

Holarctic. Mixed coniferous woods. Gaff Topsail 20Aug49\(^c\) (FMNH).

Walckenaeria castanea (Emerton, 1882) [H; Trachynella nudipalpis (Westring, 1851), Minyriolus castaneus (Emerton)] Nearctic. Mixed coniferous woods; coastal Empetrum barrens; sphagnum bogs.

Berry Head Pond (GMNP) 28Jul-10Aug99 \circ \circ ; Big Brook 22Jun02 \circ \circ ; Rocky Harbour (Bottom Brook bog) 10Aug99 \circ ; Point Riche 13Jul99 \circ \circ ; Port au Choix 8Jul00 \circ \circ .

Walckenaeria clavipalpis Millidge, 1983

Nearctic. Mixed coniferous woods.

Main River west 00Jul98°°; Port au Choix 13Jul- 1Aug99°°, 24Jul00°; Stanford River 29Jul99°.

Walckenaeria communis (Emerton, 1882)

Nearctic. Coastal rocky barrens; sphagnum bogs; mixed coniferous woods

Big Brook $20Jun02^{\circ}$; Burnt Cape $00Aug03^{\circ}$ °; Eddies Cove East $21Jun00^{\circ}$; Point Riche 8-24Jul 00° °; Sally's Cove $27Jul99^{\circ}$.

Walckenaeria cuspidata (Crosby & Bishop, 1931) [H; Cornicularia cuspidata Crosby & Bishop)]

Nearctic. Rocky barrens; back of beaches.

Big Brook 18Jun02 $^{\circ}$?; Nameless Cove 16Aug01 $^{\circ}$; Savage Cove 14Jul01 $^{\circ}$.

Walckenaeria digitata (Emerton, 1913)

Nearctic. Mixed coniferous woods.

Main River west 22Jul00♂.

Walckenaeria directa (O. Pickard-Cambridge, 1874)

Nearctic. Mixed coniferous woods.

Norris Point 13Jul009.

Walckenaeria exigua Millidge, 1983 [H; Cornicularia minuta Emerton, 1882]

Nearctic. Mixed coniferous woods; sphagnum bogs.

Berry Head Pond (GMNP) $4Aug99^{\circ}$; Rocky Harbour (Bottom Brook bog) $13Aug98^{\circ}$; Gander $28Jul98^{\circ}$; Glide Lake $00Jul94^{\circ}$; Point Riche $3Aug00^{\circ}$.

Walckenaeria karpinskii (O. Pickard-Cambridge, 1873) [H; Cornicularia karpinskii (O. Pickard-Cambridge)]

Holarctic. Mixed coniferous woods.

Big Brook 16Jul01°°, 18Jul02°; Burnt Cape 00Aug03°°; Cape Raven 15Aug99°; Main River west 00Jul98°°.

Walckenaeria lepida (Kulczyński, 1885) [H; Cornicularia unicornis (O. Pickard-Cambridge, 1861)]

Holarctic. Mixed coniferous woods. Noel Pauls Brook 26Jun77♥ (CNC).

Walckenaeria pallida (Emerton, 1882)

Nearctic. Mixed coniferous woods.

Norris Point 27Jul00♀.

Walckenaeria palustris Millidge, 1983

Nearctic. Mixed coniferous woods.

Stanford River 29Jul999.

Walckenaeria redneri Millidge, 1983

Nearctic. Mixed coniferous woods.

Main River west 00Jul98でで.

Walckenaria spiralis (Emerton, 1882) [H; Cornicularia vigilax (Blackwall, 1853)]

Holarctic. Sphagnum bogs; mixed coniferous woods.

Bakers Brook estuary 3Jul98°; Rocky Harbour (Bottom Brook bog) 20Aug99°; Burnt Cape 00Aug03°°; Mt. Scio 00Aug95°.

Walckenaeria tricornis (Emerton, 1882) [H; Tigellinus tricornis (Emerton)]

Nearctic. Mixed coniferous woods.

Burnt Cape 00Aug03°; Main River west 00Jul98°; Stanford River 29Jul99°.

Wubana drassoides (Emerton, 1882)

Nearctic. Mixed coniferous woods.

This record is from a single female. Identification of isolated females in this genus is difficult. Retained here as a Newfoundland record pending confirmation by a male.

Tuckers Head 3Oct98♀.

Wubana pacifica (Banks, 1896)

Nearctic. Mixed coniferous woods.

A record based on both males and females.

Big Brook 22Jun02♂; Burnt Cape 00Aug03♀; Corner Brook 13Jul93♀; Norris Point 29Jun-25Aug♀♂.

Zornella cultrigera (L. Koch, 1879) [H].

Holarctic. Mixed coniferous woods.

Nearctic records of *Zornella* are likely an undescribed species (Buckle et al. 2001), but the name is retained here pending revision of the genus.

Main River west 00Jul98♀.

Linyphiidae CNC#76

Not attributed to genus or species

Mixed coniferous woods.

Corner Brook 25Jul92°; Glide Lake 00Jul94°; Main River west 00Jul99°.

LIOCRANIDAE (1 sp.)

Agroeca ornata Banks, 1892.

Holarctic. Mixed coniferous woods.

Big Brook 21Jun02 $^{\circ}$; Burnt Cape 00Aug03 $^{\circ}$ $^{\circ}$; Gander 28Jul98 $^{\circ}$; Glide Lake 00Jul96 $^{\circ}$ $^{\circ}$; Main River west 00Jul98 $^{\circ}$.

LYCOSIDAE (24 spp.)

Alopecosa aculeata (Clerck, 1758) [H]

Holarctic. Rocky and *Empetrum* barrens; sphagnum bogs. Brunette Island 22Jun80°; Burnt Cape 00Aug03°°; Cape Race 11Jun95°; Hawke Hills 2Jun95° \circ °; Point Riche 4Aug00° \circ .

Arctosa alpigena (Doleschall, 1852) [H]

Holarctic. Exposed coastal *Empetrum* barrens; tops of the Long Range Mountains.

Big Brook 22Jun02 $^{\circ}$ °; Burnt Cape 00Aug03 $^{\circ}$ $^{\circ}$ °°; Gros Morne Mountain 17Aug94 $^{\circ}$; Killdevil Mountain 17Aug99 $^{\circ}$ $^{\circ}$; Watts Point 9Aug95 $^{\circ}$ °.

Arctosa insignita (Thorell, 1872)

Holarctic. Mixed coniferous woods.

Main River west 00Aug98♂.

Arctosa lama Dondale & Redner, 1983 [H; Arctosa virgo (Chamberlin, 1925)]

Nearctic. Sphagnum bogs.

Grandy Brook 25Jun49♂ (FMNH).

Arctosa raptor (Kulczyński, 1885) [H; Arctosa quinaria (Emerton, 1895)]

Holarctic. Mixed coniferous woods; sphagnum bogs.

Glide Lake 19Aug84 $^{\circ}$ (CNC); North Arm Mountain (Bonne Bay) 13Aug87 $^{\circ}$ $^{\circ}$ (CNC). Cow Head, Grand Bank, Lomond: 11-20Jun49 $^{\circ}$; 1-31Jul49 $^{\circ}$ $^{\circ}$ $^{\circ}$ $^{\circ}$; 1-31Aug $^{\circ}$ $^{\circ}$ $^{\circ}$ (FMNH). Dates not connected to localities; year assumed 1949 from context (Hackman 1954).

Arctosa rubicunda (Keyserling, 1877) [H; Arctosa emertoni Gertsch, 1934]

Nearctic. Sphagnum bogs.

Cape Ray 1Jul96[♀] (and CNC).

Pardosa albomaculata Emerton, 1885

Nearctic. Talus and mixed vegetation at higher elevations of the Long Range Mountains.

Gros Morne Mountain 8Oct949; Tablelands 15Aug929.

Pardosa concinna (Thorell, 1877) [H]

Nearctic. Exposed coastal *Empetrum* barrens. Common. Cape Onion 4Aug96°°; Cape Ray 1Jul96°; Cape Spear 3Sep 95°°; Point Riche 17Aug98°°°; Watts Point 1Aug95°°.

Pardosa furcifera (Thorell, 1875) [H]

Nearctic. Empetrum barrens on exposed coasts and at higher elevations

Big Brook $21Jun02^{\circ}$; Killdevil Mountain $17Aug99^{\circ}$; Nameless Cove $16Aug01^{\circ}$; Savage Cove $14Jul01^{\circ}$; Watts Point $19Aug95^{\circ}$?

Pardosa fuscula (Thorell, 1875) [H]

Nearctic. Sphagnum bogs.

Bay Bulls 15Aug $96^\circ \circ$; Big Brook 21Jun 02° ; Burnt Cape 00Aug $03^\circ \circ \circ \circ$; Cape Freels 12Jul01; Cape Ray 1Jul 96° .

Pardosa groenlandica (Thorell, 1872) [H]

Nearctic. Cobble and pebble beaches. In NF rarely found away from the coast. Common.

Bay Bulls 1May96°; Bristols Hope 11Nov94°; Conche 16Jul03°; Port au Port Peninsula°°; St. Pauls 6Aug95°.

Pardosa hyperborea (Thorell, 1872) [H; Pardosa saltuaria (L. Koch, 1870)]

Holarctic. Mixed coniferous woods; *Empetrum* barrens; sphagnum bogs. Common.

Boutitou 17Jul03 $^{\circ}$; Cape Ray 1Jul96 $^{\circ} \circ \circ \circ \circ$; Cape Spear 3Sep95 $^{\circ} \circ \circ$; Hawke Hills 2Jun95 $^{\circ} \circ \circ$; Killdevil Mountain 17Aug99 $^{\circ} \circ \circ$.

Pardosa lapidicina Emerton, 1885 [H]

Nearctic. Talus slopes of the Long Range Mountains. Gros Morne Mountain 31Jul95 $^{\circ}$; Killdevil Mountain 2Jul95 $^{\circ}$; Tablelands 11Aug94 $^{\circ}$.

Pardosa mackenziana (Keyserling, 1877) [H]

Nearctic. Mixed coniferous woods.

Bakers Brook 8-27Aug00°♂; Gander 1Jul79♂; Glide Lake 8-22Jul°♂; Port au Choix13Jul99°; Woody Point 9Oct94°.

Pardosa moesta Banks, 1892 [H]

Nearctic. Coastal and inland Empetrum barrens.

Cape Spear 3Sep95°°; Gander 21Jun98°♂; Green Gardens 18Jun94°°°♂; Hawke Hills 2Jun95°°; Port au Choix 6Aug96°°.

Pardosa xerampelina (Keyserling, 1877) [H]

Nearctic. Mixed coniferous woods; Empetrum barrens; sphag-

num bogs.
Glide I ake 7Iul94♀♂: Green Gardens 7Iul97♀: Port au Choix

Glide Lake 7Jul94°°; Green Gardens 7Jul97°; Port au Choix 23Jul97°; Tablelands 23Jul93°°; TNNP 11Jul93°.

Pirata bryantae Kurata, 1944 [H]

Nearctic. Mixed coniferous woods.

Main River west 00Aug98♂.

Pirata canadensis Dondale & Redner, 1981

Nearctic. Mixed coniferous woods; sphagnum bogs.

Rocky Harbour (Bottom Brook bog) 29Jul98°, 20Aug99°; Main River west 00Jul98°.

Pirata cantralli Wallace & Exline, 1978 [H; Pirata insularis Emerton, 1885]

Nearctic. Sphagnum bogs.

Cape Broyle, Gander, Grand Bruit, Pushthrough, Woody Point: $1\text{-}30\text{Jun}49\,^\circ\,^\circ\,^\circ\,^\circ$; $1\text{-}31\text{Jul}49\,^\circ\,^\circ\,^\circ$; $1\text{-}31\text{Aug}49\,^\circ\,^\circ$ (FMNH). Dates not connected to localities; year assumed 1949 from context (Hackman 1954).

Pirata insularis Emerton, 1885 [H]

Holarctic. Sphagnum bogs.

Bakers Brook estuary 9Jul99♂; Berry Head Pond (GMNP) 22Aug00♀♂; Rocky Harbour (Bottom Brook bog) 23Jul99♀♂; Mt. Scio 00Aug95♂.

Pirata minutus Emerton, 1885 [H]

Nearctic. Mixed coniferous woods; sphagnum bogs. Main River west 18Jun99°.

Pirata montanus Emerton, 1885 [H]

Holarctic. Mixed coniferous woods; sphagnum bogs.

Base of Killdevil Mountain 13Jul49° (FMNH); East Brook (which one unspecified) 14Jul49° (FMNH).

Pirata piraticus (Clerck, 1758) [H]

Holarctic. Sphagnum bogs.

Bay Bulls 5Aug 96° ; Big Brook 24Jun $02^{\circ} \circ \circ \circ \circ$; Cape Ray 1Jul 96° ; Hawkes Bay 1Jul 99° .

Trochosa terricola Thorell, 1856 [H; Trochosa terricola pratensis Emerton, 1885]

Holarctic. Mixed coniferous woods; shrubs and herbs in clearings of woods; litter and stones at back of beaches; abandoned meadows; gardens. Common.

Brunette Island 22Jun80 $^{\circ}$; Nameless Cove 16Aug01 $^{\circ}$; Norris Point 9Aug95 $^{\circ}$; Shallow Bay 27May96 $^{\circ}$; St. John's 12May80 $^{\circ}$ $^{\circ}$.

MIMETIDAE (1 sp.)

Ero canionis Chamberlin & Ivie, 1935 [H]

Nearctic. Empetrum barrens; shrubs and herbs at edges of woods.

Point Riche 17Jul00[♀].

NESTICIDAE (1 sp.)

Eidmanella pallida (Emerton, 1875) [H; Nesticus pallida Emerton]

Palaearctic; introduced. Mixed coniferous woods; caves; human habitations.

Corner Brook (in cave) 13Sep889 (CNC).

PHILODROMIDAE (7 spp.)

Philodromus alascensis Keyserling, 1884 [H; Philodromus pernix Blackwall, 1846]

Holarctic. Exposed coastal Empetrum barrens.

Boutitou 17Jul03♀.

Philodromus imbecillus Keyserling, 1880.

Nearctic. Mixed coniferous woods.

Bay d'Espoir 11Jul88 $^{\circ}$ ° (CNC); Witch Hazel Ridge 25Jun81 $^{\circ}$ ° (CNC).

Philodromus mysticus Dondale & Redner, 1975

Holarctic. Mixed coniferous woods.

Main River west 00Jul98♀.

Philodromus placidus Banks, 1892

Nearctic. Mixed coniferous woods.

Gander 00Aug98♂♂.

Philodromus rufus quartus Dondale & Redner, 1968 [H; Philodromus rufus Walckenaer, 1826]

Nearctic. Mixed coniferous woods; shrubs and herbs in clearings in woods.

Gadds Harbour 24Jul99°; Gander 1Jul78°°, Logy Bay 8-23Jul01°°, Norris Point 3Jul00°; Rocky Harbour 30Jul97°.

Thanatus formicinus (Clerck, 1758) [H]

Holarctic. Exposed coastal rocky and *Empetrum* barrens. Bay Bulls 4May96°; Burnt Cape 00Aug03°; Logy Bay 12Jun01°; Table Point 3Aug95°; Watts Point 9Aug95°.

Tibellus maritimus (Menge, 1875) [H]

Holarctic. Coastal Empetrum barrens.

Bay Bulls 16Jul95°; Logy Bay 8Jul01°; Norris Point 3Jul00°; St. John's 12May80°; St. Lunaire 00Aug00°.

PHOLCIDAE (1 sp.)

Pholcus phalangioides (Fuesslin, 1775)

Palaearctic; introduced. Houses in St. John's.

St. John's 15Aug009.

PISAURIDAE (1 sp.)

Dolomedes striatus Giebel, 1869 [H: Dolomedes fulviatronatus Bishop, 1924 and Dolomedes vittatus Walckenaer, 1837]

Nearctic. Edges of small pools; wet areas.

Come by Chance 27Aug49\(^\) (FMNH); Corner Brook 16Aug 49\(^\) (FMNH); East Brook, Lomond 15Jul49\(^\) (FMNH); Hogans Pond 6Jun49\(^\) (FMNH).

SALTICIDAE (15 spp.)

Chalcoscirtus alpicola (L. Koch, 1876)

Holarctic. Sub-arctic, exposed, coastal rocky and *Empetrum* barrens.

Big Brook16Jul01♂.

Dendryphantes nigromaculatus (Keyserling, 1885)

Nearctic. Exposed coastal barrens; exposed stunted woods. Bay d'Espoir 15Jul85 $^{\circ}$ (CNC).

Evarcha hoyi (Peckham & Peckham, 1883) [H]

Nearctic. Empetrum barrens; talus slopes.

Boutitou 17Jul03°; Gander 00Aug98°; Killdevil Mountain 9Aug94°; Logy Bay 16Sep03°; Main River west 29Jul00°.

Ghelna canadensis (Banks, 1897)

Nearctic. Sphagnum bogs.

Bakers Brook estuary 19Aug99[♀].

Neon nellii Peckham & Peckham, 1888 [H] Nearctic. Rocky and Empetrum barrens.

Berry Head Pond (GMNP) 19Jul00♂; Logy Bay 18Jun01♂; Norris Point 28Jul00♂; Point Riche 17Jul00♀♀.

Pelegrina flavipes (Peckham & Peckham, 1888) [H; Metaphidippus flavipedes (Peckham & Peckham)]

Nearctic. Mixed coniferous woods; shrubs and herbs in clearings in woods.

Cupids 5Sep99°, St. John's 8Sep98°.

Pelegrina montana (Emerton, 1891) [H; Metaphidippus montanus (Emerton)]

Nearctic. Empetrum barrens; low vegetation.

Brunette Island 14Jul94 $^{\circ}$; Gander 1Jul78 $^{\circ}$ $^{\circ}$; Millertown 26Jun80 $^{\circ}$ $^{\circ}$; St. John's 8Sep98 $^{\circ}$.

Phidippus borealis Banks, 1895 [H; Phidippus purpuratus Keyserling, 1885]

Nearctic. Talus slopes and rocky barrens at low and medium elevations in the Long Range Mountains.

Tablelands 11Aug94♥; Winter House Brook canyon 10Jul97♥.

Phidippus whitmanii Peckham & Peckham, 1909 [H; Phidippus princeps (Peckham & Peckham, 1883]

Nearctic. Empetrum barrens; sphagnum bogs.

Rencontre West 15Jun499 (FMNH).

Salticus scenicus (Clerck, 1758) [H]

Palaearctic; introduced. On houses; *Empetrum* barrens; abandoned meadows; litter and stones at back of beaches.

Embree 12Nov 92°; Clarkes Beach 24May98°; Logy Bay 18Jun01°°; Norris Point 29Jul00°; St. John's 2Jun93°.

Sitticus cutleri Prószyński, 1980

Nearctic. Coastal Empetrum barrens.

Maddox Cove 1Jul94♂.

Sitticus finschii (L. Koch, 1879)

Holarctic. Mixed coniferous woods; sphagnum bogs. Gander 00Aug02°; Main River west 8Aug00°.

Sitticus floricola palustris (Peckham & Peckham, 1883) [H; Sitticus palustris (Peckham & Peckham)]

Nearctic. Back of beaches; sand dunes; edge of lakes among driftwood.

Broom Point 16Jul98 $^{\circ}$ °; Conche 27Jul04 $^{\circ}$ °; Gadds Harbour 8Jul94 $^{\circ}$ °; Outer Cove 3Aug96 $^{\circ}$; St. Pauls 25Jul97 $^{\circ}$ °.

Sitticus ranieri (Peckham & Peckham, 1909)

Holarctic. Empetrum barrens; talus slopes.

Gander 00Aug98 \circ 0 \circ ; Logy Bay 12Jun01 \circ 0; Killdevil Mountain 17Aug99 \circ .

Sitticus striatus Emerton, 1911 [H]

Holarctic. Mixed coniferous woods; sphagnum bogs.

Blackhead (St. John's) 10Jun01 $^{\circ}$; Lomond 14Jul98 $^{\circ}$; Main River west 27Jul00 $^{\circ}$ $^{\circ}$.

Tetragnathidae (6 spp.)

Meta ovalis (Gertsch 1933) [H; Meta menardi (Latreille, 1804)]

Nearctic. Houses and outbuildings; basements; root cellars. Colliers 14Dec04 $^{\circ}$; Logy Bay 00May98 $^{\circ}$; St. John's 00Jun 99 $^{\circ}$.

Pachygnatha brevis Keyserling, 1884 [H]

Nearctic. Shrubs and herbs in damp places; near waterways. St. John's 12may80°.

Tetragnatha elongata Walckenaer, 1842 [H]

Nearctic. Shrubs and herbs in damp places; near waterways. Portugal Cove 11Jul79.

Tetragnatha extensa (Linnaeus, 1758) [H]

Holarctic. Shrubs and herbs in damp places; near waterways; wetlands; herbs at back of beaches; road-cuttings.

Hawkes Bay 1Jul99 $^\circ$ °; Plum Point 3Jul80 $^\circ$; Port au Choix 4Aug97 $^\circ$ °; Raleigh 4Aug98 $^\circ$ °; Rocky Harbour 30Jul97 $^\circ$.

Tetragnatha laboriosa Hentz, 1850 [H]

Nearctic. Shrubs and herbs in damp places; near waterways. Rocky Harbour (Bottom Brook bog) 16Jul00°; Gander 28Jul98°.

Tetragnatha versicolor Walckenaer, 1842

Nearctic. Shrubs and herbs in damp places; near waterways. Bakers Brook estuary 8-27Aug00°♂; Berry Head Pond (GMNP) 24Jul99♂.

THERIDIIDAE (26 spp.)

Achaearanea ohlerti (Thorell, 1870)

Holarctic. Mixed coniferous woods.

Gadds Harbour 24Jul99♀.

Achaearanea tabulata Levi, 1980

Introduced; of unknown origin (Dondale et al. 1994). In and on houses; on sheds and outbuildings; in gardens. St. John's 24Sep 99° , 3Aug 01° , 23Aug 01° .

Achaearanea tepidariorum (C. L. Koch, 1841)

Introduced, of unknown origin; possibly tropical (Lindroth 1957)

In and on houses; on sheds and outbuildings; in gardens. St. John's $3Aug01^{\circ}$, $1May04^{\circ}$ $^{\circ}$.

Crustulina sticta (O. Pickard-Cambridge, 1861) [H; Crustulina borealis Banks, 1900]

Holarctic. Among stones at back of beaches; among stones on *Empetrum* barrens; among stones on sides and tops of mountains

Eddies Cove East $21Jun01^{\circ} \circ \circ \circ$; Killdevil Mountain 17Aug $99 \circ \circ$; New Ferolle $16Jul00^{\circ} \circ$; Point Riche $29Jun99^{\circ} \circ \circ$; Port au Choix $5Jul04^{\circ} \circ \circ \circ \circ \circ$.

Dipoena nigra (Emerton, 1882)

Nearctic. Mixed coniferous woods; shrubs.

Gander 23Jun82♂ (CNC).

Enoplognatha caricis (Fickert, 1876) [H; Theridion tectum (Keyserling, 1884)]

Holarctic. Mixed coniferous woods; shrubs; rocky barrens; coastal *Empetrum* barrens.

Point Riche $17Jul00^{\circ}\circ$; Port au Choix $4Jul04^{\circ}\circ$ (and CNC); Table Point $23Jul97^{\circ}\circ$ (and CNC).

Enoplognatha intrepida (Sørensen, 1898)

Nearctic. Exposed rocky and Empetrum barrens.

Burnt Cape 00Aug03♂♂; Cape Raven 15Aug99♀♂; Point

Riche 24Jul98♀♂.

Enoplognatha marmorata (Hentz, 1850)

Nearctic. Mixed coniferous woods; sand dunes.

Cape Freels 10Jul01°; Glide Lake 00Jul96°; Table Point 18-30Jul00°.

Enoplognatha ovata (Clerck, 1758)

Palaearctic; introduced. Shrubs and herbs; roadside vegetation; gardens; coastal barrens.

Gadds Harbour 24Jul99°°; Rocky Harbour 8Aug97°; St. John's 27Aug97°; Woody Point 8Aug93°.

Neottiura bimaculata (Linnaeus, 1767)

Palaearctic; introduced. Mixed coniferous woods; gardens. Gadds Harbour 24Jul99; Gander 00Jul98°; Logy Bay 24Jul03°.

Robertus banksi (Kaston, 1946) [H; Ctenium banksi Kaston] Nearctic. Mixed coniferous woods.

Cow Head, Deer lake, Lomond, South Branch (Codroy), Stephenville Crossing: 1-20Jun49°°°3; 1-31Jul49°°; 11-20Aug49° (FMNH). Dates not connected to localities; year assumed 1949 from context (Hackman 1954).

Robertus borealis (Kaston, 1946) [H; Ctenium boreale Kaston] Nearctic. Mixed coniferous woods.

Gaff Topsail 20Aug49 $^{\circ}$ (FMNH); Cow Head 12Aug49 $^{\circ}$ (FMNH); 40 miles west of St John's 6Aug76 $^{\circ}$ (CNC).

Robertus fuscus (Emerton, 1894) [H; Ctenium fuscum (Emerton)]

Nearctic. Empetrum barrens; rocky barrens.

Boutitou 17Jul03 $^{\circ}$; Main River west 00Jul98 $^{\circ}$; Nameless Cove 16Aug01 $^{\circ}$ $^{\circ}$ $^{\circ}$ $^{\circ}$; Point Riche 17Aug98 $^{\circ}$; Table Point 30Sep98 $^{\circ}$.

Robertus riparius (Keyserling, 1886) [H; Ctenium riparium (Keyserling)]

Nearctic. Mixed coniferous woods.

Cinq Cerf Brook, Grand Bruit, Grandy Brook, South Branch (Codroy), Table Mountain (St. Georges): 11-20, 21-30Jun 49°°° (FMNH); 1-10, 11-20, 21-31Jul49°° (FMNH); 11-20Aug49° (FMNH). Dates not connected to localities; year assumed 1949 from context (Hackman 1954).

Rugathodes aurantius (Emerton, 1915) [H; Theridion aurantium Emerton]

Holarctic, Mixed coniferous woods.

Corner Brook 19Jul93 : Port au Choix 24Jun00 ...

Rugathodes sexpunctatus (Emerton, 1882) [H; Theridion sexpunctatum Emerton]

Holarctic. Mixed coniferous woods; shrubs and herbs; gardens. Berry Head Pond (GMNP) 4Aug99°°; Conche 16Jul03°°; base of Killdevil Mountain 20Jul00°; Norris Point 13Aug 94°; Port au Choix 24Jul00°.

Steatoda bipunctata (Linnaeus, 1758) [H]

Palaearctic; introduced. On or near human structures: houses, basements, outbuildings and fences.

Corner Brook 8Jul99°; Deer Lake 12Sep97°; Dunville 25Apr97°; Port au Choix 4Jul03°; St. John's 10Jan02°.

Theonoe stridula Crosby, 1906

Nearctic. Mixed coniferous woods; wetlands.

Berry Head Pond (GMNP) 19Jul00°°; Rocky Harbour (Bottom Brook bog) 6Aug98°; Main River west 22Jul00°.

Theridion differens Emerton, 1882

Nearctic. Mixed coniferous woods; wetlands.

Gander 20Jul78° (CNC); South Branch (Codroy) 24- 31Jul 74° (CNC); St. Georges 1Jul87° (CNC).

Theridion glaucescens Becker, 1879 [H]

Nearctic. Mixed coniferous woods; wetlands.

Woody Point 17Jul49° (FMNH?); Gambo 25Aug49° (FMNH?). This species not found by CDD in Hackman's collections in FMNH. This record may be erroneous but is retained here pending clarification.

Theridion montanum Emerton, 1882 [H]

Holarctic. Mixed coniferous woods.

Berry Head Pond (GMNP) 24Jul99°; Gadds Harbour 24Jul99°; Mt. Scio 15Sep99°; Shallow Bay 13Jul97°.

Theridion murarium Emerton, 1882 [H]

Nearctic. Mixed coniferous woods; wetlands.

Square Pond (which one unspecified) 9Jun81° (CNC). All Hackman's specimens immature.

Theridion petraeum L. Koch, 1872

Holarctic. Among stones at mid and high elevations on the Long Range Mountains.

Tablelands 1Aug00♀♀.

Theridion pictum (Walckenaer, 1802)

Holarctic. Mixed coniferous woods.

Gander 00Aug98♂; Main River west 28Jul00♂.

Theridula emertoni Levi, 1954 [H; Theridula sphaerula Emerton, 1882]

Nearctic. Mixed coniferous woods. Gander 00Aug98♂; Lomond 14Jul98♀.

Thymoites oleatus (L. Koch, 1879)

Holarctic. Exposed coastal Empetrum barrens.

Savage Cove 23Aug98♀.

THERIDIOSOMATIDAE (1 sp.)

Theridiosoma gemmosum (L. Koch, 1877) [H; Theridiosoma radiosum (Emerton, 1884)]

Palaearctic; introduced. Mixed coniferous woods; wetlands. Bay d'Espoir 15Jul85° (CNC); South Branch (Codroy) 3Jul49♀♀ (FMNH); Spruce Brook 8-9Jul49♀ (FMNH).

THOMISIDAE (14 spp.)

Bassaniana utahensis (Gertsch, 1932). [H; Coriarachne versicolor Keyserling, 1880]

Nearctic. Mixed coniferous woods; shrubs and herbs in

Gander 1Jul78♂; Terra Nova village 15Sep00♀.

Misumena vatia (Clerck, 1758) [H]

Holarctic. On flowers among shrubs and herbs; on flowers along roadsides.

Badger 27Jun80♥; Bakers Brook estuary 26Aug98♥; Blackhead (St. John's) 18Sep03[♀]; Gander 1Jul79[♂]; Hawkes Bay 1Jul98♂.

Ozyptila distans Dondale & Redner, 1975 [H; Oxyptila americana Banks, 1895]

Nearctic. Mixed coniferous woods. Gander 00Aug98♂; TNNP 11Jun93♀♂.

Ozyptila gertschi Kurata, 1944

Holarctic. Coastal *Empetrum* barrens. Burnt Cape 00Aug03♀♀♂♂.

Ozyptila sincera canadensis Dondale & Redner, 1975 [H; Ozyptila bryantae Gertsch, 1939]

Nearctic. Coastal rocky barrens.

Burnt Cape 00Aug03♀♀♂♂; Point Riche 13Jul99♀♂; Port au Choix 5Jul049.

Xysticus canadensis Gertsch, 1934 [H]

Holarctic. Mixed coniferous woods.

Crooked Lake 19Aug84\(\circ\) (CNC); Hampden 14Jun77\(\circ\) (CNC); Kings Point 19Aug84♥ (CNC); Main River 16Aug84♥ (CNC); 20 km north of Millertown 19Aug84♂ (CNC).

Xysticus discursans Keyserling, 1880 [H]

Nearctic. Mixed coniferous woods.

Gander 1Jul78°; Lomond 9Jun94°; Main River west 00Jul 98♂; Port au Choix 24Jul00♂.

Xysticus elegans Keyserling, 1880 [H]

Nearctic. Mixed coniferous woods; shrubs and herbs.

Corner Brook 16Aug49[♀] (FMNH); Gambo 28Aug49[♂] (FMNH).

Xysticus emertoni Keyserling, 1880 [H] Holarctic. Rocky barrens; back of beaches.

Green Gardens 27Jun95°; Highlands of St. John 14Aug00°; New Ferolle 13Jul04♂; Point Riche 12Jul99♀; Western Brook estuary 29Jul97 ♀ ♀.

Xysticus keyserlingi Bryant, 1930

Nearctic. Exposed coastal Empetrum barrens; tops of Long Range Mountains.

Burnt Cape 00Aug03♀♂; Killdevil Mountain 17Aug99♂; Point Riche 4Aug00♀.

Xysticus labradorensis Keyserling, 1887

Holarctic. Exposed coastal Empetrum barrens.

Point Riche 18Aug02♀♂.

Xysticus luctuosus (Blackwall, 1836)

Holarctic. Mixed coniferous woods; shrubs and herbs. Barbace Cove 7Jul03©; Main River west 00Jul98©; Seal Cove (Bonne Bay) 14Jul98♀♂.

Xysticus obscurus Collett, 1877

Holarctic. Exposed, rocky, coastal barrens; back of beaches. Big Brook 19-21Jun02♀♂.

Xysticus triguttatus Keyserling, 1880 [H]

Nearctic. Empetrum barrens; abandoned meadows.

Big Brook 25Jun02♂; Blackhead (St. John's) 9Jul01♂; Eddies Cove East 21Jun00°♥; Logy Bay 11Jul02°♥; Point Riche 8Jul00♂.

Uloboridae (1 sp.)

Hyptiotes gertschi Chamberlin & Ivie, 1935

Nearctic. Mixed coniferous woods.

Deer Arm 8Aug97♂; Berry Head Pond (GMNP) 14Aug98♂.

Discussion

Origins of the Newfoundland spider fauna

For present purposes we call all unidentified Newfoundland species Nearctic because the taxonomy of European and Holarctic spiders is relatively well known. The majority (c. 61%) of Newfoundland species are Nearctic, with significant Holarctic (c. 33%) and introduced (c. 6%) components (Table 1). Given that recruitment to Newfoundland would largely have been from the west on the prevailing winds (see above), the Nearctic proportion is not surprising. In Canada in general, the proportion of Holarctic species appears to increase with increasing latitude. The wetlands of Ouebec, for example, had an overall Holarctic proportion of about 33%, while in the northern wetlands of the subarctic and arctic parts of northern Quebec the Holarctic component was nearly 50% (Koponen 1994). On the Belcher Islands (Hudson Bay) the Holarctic proportion was 58% (Koponen 1992).

Introduced species

The number and proportion of introduced Palaearctic species from several different arthropod taxa reflect Newfoundland's long history of European immigration and commerce, but the percentage varies between taxa. For example, the Plecoptera (stoneflies) and Ephemeroptera (mayflies) have no introduced species (Larson and Colbo 1983), approximately 17% (20 of 120) of the Cicadellidae (leafhoppers) are introduced (Hamilton and Langor 1987), and all 12 terrestrial Isopoda (wood-lice) were introduced to Newfoundland (Palmen 1951).

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Family	Nearctic	Holarctic	Introduced	Total species	% of total
Agelenidae	1	0	3	4	1.1
Amaurobiidae	5	0	0	5	1.4
Araneidae	7	10	3	20	5.5
Clubionidae	8	6	0	14	3.9
Cybaeidae	1	0	0	1	<1
Dictynidae	6	3	0	9	2.5
Gnaphosidae	3	11	0	14	3.9
Hahniidae	5	1	0	6	1.7
Linyphiidae	132	53	6	191	52.6
Liocranidae	0	1	0	1	<1
Lycosidae	15	9	0	24	6.6
Mimetidae	1	0	0	1	<1
Nesticidae	0	0	1	1	<1
Philodromidae	3	4	0	7	1.9
Pholcidae	0	0	1	1	<1
Pisauridae	1	0	0	1	<1
Salticidae	10	4	1	15	4.1
Tetragnathidae	5	1	0	6	1.7
Theridiidae	12	9	5	26	7.1
Theridiosomatidae	0	0	1	1	<1
Thomisidae	7	7	0	14	3.9
Uloboridae	1	0	0	1	<1
Totals: 22 Families	223 (61.4%)	119 (32.8%)	21 (5.8%)	363	

TABLE 2. The 21 spider species introduced to Newfoundland.

Agelenidae	Linyphiidae	Salticidae
Tegenaria atrica	Centromerita bicolor	Salticus scenicus
Tegenaria domestica	Dicymbium nigrum	Theridiidae
Tegenaria duellica	Erigone dentipalpis	Achaearanea tabulata
Araneidae	Lepthyphantes leprosus	Achaearanea tepidariorum
Araneus diadematus	Lepthyphantes tenuis	Enoplognatha ovata
Larinioides sclopetarius	Tiso vagans	Neottiura bimaculata
Zygiella atrica	Eidmanella pallida	Steatoda bipunctata
	Pholcidae	Theridiosomatidae
	Pholcus phalangioides	Theridiosoma gemmosum

Twenty-one spider species are here considered to be introductions to Newfoundland (Table 2). Two species are widespread and locally abundant throughout the island: Araneus diadematus and Tegenaria domestica occur from the Avalon Peninsula in the south to the tip of the Northern Peninsula. Interestingly, neither of these now widespread species was seen by Hackman (1954) who only included A. diadematus in his list on the basis of a mention in Wiehle (1931). In fact the first North American record for this species was from Brigus, Newfoundland (Pickard-Cambridge 1881). Since both species are large and not easily overlooked, both were probably very rare prior to 1954 and have become widespread in the last 50 years. A similar, rapid colonisation has been demonstrated for other arthropod taxa. For example, in 1955 the carabid beetles Amara aulica Panzer and Pterostichus melanarius Illiger were respectively confined to the

west coast of Newfoundland and known only from a single known locality on the Avalon Peninsula. In less than 30 years both species became widespread across Newfoundland (Larson and Langor 1982).

Other species are well established in Newfound-land but less widespread. *Steatoda bipunctata* has not been found north of Port au Choix. Neither *Larinioides sclopetarius* nor *Salticus scenicus* have been found north of Rocky Harbour. *Zygiella atrica* is particularly frequent on the Avalon Peninsula but has been found nowhere else in Newfoundland except Deer Lake. Whether these distributions are artefacts of collecting, intermediate points in the spread of these species across the island, or the limits of these species' colonising ability is unknown.

Dicymbium nigrum is well established as several wild populations but only in a restricted area in and around St. John's. A few species are known only from

TABLE 3. Comparison of seven Canadian provincial and territorial spider faunas.

	BC^1	QC^2	SK^3	AB^3	$\mathrm{MB^4}$	NF	YK ⁵
Area 1000 km2 6	947.8	1700	651.9	661.19	649.95	111.39	483.45
Ecodistricts ⁷	112	87	154	146	94	25	78
Latitude range°N 6	49-60	45-62	49-60	49-60	49-60	47-52	60-69
Total species	657	617	550	527	483	363	297
Total families	35	28	23	22	20	22	15
Agelenidae	9	4	9	8	8	4	1
Amaurobiidae	10	14	4	5	7	5	2
Antrodiaetidae	2	0	0	0	0	0	0
Anyphaenidae	2	0	1	1	0	0	0
Araneidae	33	31	26	29	27	20	16
Clubionidae	15	21	17	19	20	14	7
Corinnidae Cybaeidae	5 11	3	3	$\frac{2}{0}$	0 1	0 1	0
Dictynidae	29	23	30	19	21	9	10
Dipluridae	1	0	0	0	0	0	0
Dysderidae	1	1	0	0	0	0	0
Gnaphosidae	49	34	46	52	31	14	23
Hahniidae	15	5	6	7	5	6	4
Linyphiidae	231	240	198	201	179	191	136
Liocranidae	5	8	198	5	6	191	130
	5 47	53	3 41		40	24	30
Lycosidae				46		= :	
Mecicobothriidae	1 2	0 5	0	0	0 2	0	0
Mimetidae			1	1		1	0
Miturgidae	1	1	0	0	0	0	0
Mysmenidae	1	0	0	0	0	0	0
Nesticidae	1	2	0	0	0	1	0
Oecobiidae	0	1	0	0	0	0	0
Oxyopidae	1	1	1	0	1	0	0
Philodromidae	33	20	24	22	22	7	13
Pholcidae	3	1	1	1	0	1	0
Pimoidae	2	0	0	0	0	0	0
Pisauridae	1	5	2	2	4	1	1
Salticidae	45	43	50	35	33	15	17
Segestriidae	1	0	0	0	0	0	0
Telemidae	1	0	0	0	0	0	0
Tetragnathidae	12	15	12	8	13	6	3
Theridiidae	51	48	38	27	31	26	14
Theridiosomatidae	0	1	0	0	0	1	0
Thomisidae	32	32	32	34	29	14	17
Titanoecidae	2	1	2	2	2	0	2
Uloboridae	1	3	1	1	1	1	0
Zoridae	1	0	0	0	0	0	0

¹Bennett 2001; Bennett et al. 2004*. ²Bélanger and Hutchinson 1992, as revised by Paquin et al. 2001, with additions in Paquin and Dupérré 2003. ³Buckle and Holmberg 2004*. ⁴Aitchison-Benell and Dondale 1990. ⁵Dondale et al. 1997. Some familial placements adjusted in accordance with Platnick 2005*.

one or two specific buildings in the St. John's area, either houses and other domestic structures (*Pholcus phalangioides*, *Tegenaria duellica*, *Achaearanea tepidariorum* and *A. tabulata*) or commercial buildings (*Tegenaria atrica*). The remaining species are known from small numbers of specimens from a small number of localities in the wild; little can be said about

them until further collections tell us more about their distributions and habitats.

Composition of the fauna: comparisons with other areas

In general terms the composition of any terrestrial fauna will be a reflection of land area, ecological diversity and latitudinal position. Table 3 compares these

⁶Government Websites: Alberta, British Columbia, Manitoba, Newfoundland and Labrador, Quebec, Saskatchewan, Yukon 2004* (Some numbers approximate)

⁷ Ecological Stratification Working Group 1995.

Table 4. Proportions of Linyphiidae, Linyphiidae plus Lycosidae, and Linyphiidae plus Lycosidae plus Dictynidae in some northern spider faunas.

	BC ¹	QC ²	SK ³	AB ³	$\mathrm{MB^4}$	NF	YK ⁵	GL ⁶	BL ⁷	HZ ⁸	PL ⁹
Total families	35	28	23	22	20	22	15	10	8	4	3
Total species	657	617	550	527	483	363	297	70	33	13	7
Linyphiidae %	35.2	38.9	36.0	38.1	37.1	52.6	45.8	64.3	69.7	69	57.2
†L + L %	42.3	47.5	43.5	46.9	45.3	59.2	55.9	75.7	81.8	84	85.7
L + L + D%	46.7	51.2	48.9	50.5	49.7	61.7	59.3	78.6	84.9	92.3	100

¹Bennett 2001; Bennett et al. 2004*. ² Bélanger and Hutchinson 1992, as revised by Paquin et al. 2001, with additions in Paquin and Dupérré 2003. ³Buckle and Holmberg 2004*. ⁴Aitchison-Benell and Dondale 1990. ⁵Dondale et al. 1997. ⁶Larsen and Scharff 2003. ⁷Koponen 1992. ⁸Leech 1966. ⁹Braendegaard 1960. Some familial placements adjusted in accordance with Platnick 2005.

†L+ L % = % of Linyphiidae + Lycosidae

L + L + D% = % of Linyphiidae + Lycosidae + Dictynidae

three geographical attributes, total number of species, number of families and number of species within each family for each of the seven Canadian provinces or territories for which there is information. Locality columns are arranged left to right in order of most to least total species. There is a general correlation between the three geographical attributes and the number of families and species; analysis of the obvious exceptions will not be possible until knowledge of the faunas is standardised.

Several authors (e.g. Leech 1966; Koponen 1992, 1996; Larsen and Scharff 2003) have pointed out that northern spider faunas are numerically dominated by species of Linyphiidae, Lycosidae and Dictynidae in descending order of importance. For example, species of these three families make up 100% of the most northern spider fauna in the world on Peary Land, Greenland (c. 82.5°N), excluding for present purposes the introduced agelenid Tegenaria domestica (Braendegaard 1960). Table 4 compares the cumulative proportions of these three families (i.e. Linyphiidae alone, Linyphiidae plus Lycosidae, Linyphiidae plus Lycosidae plus Dictynidae) as a scale of northernness for the seven Canadian areas considered in Table 3. In addition Table 4 includes the proportions in two other Canadian locations, the Belcher Islands (56° N) and Hazen Camp (82° N), and two non-Canadian locations, Peary Land (82.5° N) and the whole of Greenland (60°-82.5° N). The overall trend of increasing numerical dominance of Linyphiidae, Lycosidae and Dictynidae is confirmed.

Other Canadian spider fauna surveys have included species likely to be discovered in the area in question in the future (e. g. Dondale et al. 1997; Bélanger and Hutchinson 1992). While this may be justified when species absent from the area in question have been reported from a contiguous land mass, it seems less useful when dealing with an island.

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