

**AN ANNOTATED CHECKLIST OF
THE SPIDERS (ARACHNIDA: ARANEAE) OF
MOUNT KATAHDIN, BAXTER STATE PARK, MAINE, USA**

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Abstract

The spider fauna of Mount Katahdin comprises 145 species of 16 families, and 90 genera, based on published and unpublished records. Most species were taken during a spider-collecting expedition in 1986, resulting in a 229.5% increase over the previously known fauna of 44 species. Species richness per family ranges from one (Cybaeidae, Pisauridae) to 59 (Linyphiidae), with the Lycosidae ranking second and the Theridiidae third. Foraging guild composition is skewed in favor of web spinners, largely due to linyphiid richness. Historically, collections of Mount Katahdin spiders have yielded type specimens of five new species and 18 new state records; however, an additional 110 species are likely to inhabit spruce-fir forests on Mount Katahdin. The current fauna represents ca. 57% of the potential fauna. Assessment of the actual fauna will require additional spatial and temporal sampling in more diverse habitats and strata. Off-trail hiking and climate change may adversely impact unique species of spiders associated with fragile subalpine-alpine communities near the summit.

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Introduction

In June and July of 1986, we conducted a spider-collecting expedition to Mount Katahdin (45° 54.8' N, 68° 55.4' W; summit 5,267 ft.) and environs. The Baxter State Park Authority graciously granted collecting permits for this endeavor which led to several new discoveries; namely, collection of species previously unknown to science; records of species not previously recorded from Mount Katahdin; and species-range extensions, including new state records. These discoveries prompted us to compile an annotated checklist of the spiders of Mount Katahdin, a checklist based on three principal sources of data: 1) records of spiders previously collected on Mount Katahdin and published in the scientific literature; 2) records of species collected by students, Park personnel, and others before and after 1986; and 3) records of spiders collected during the 1986 expedition. This paper summarizes our findings.

Materials and Methods

Pitfall traps

Aluminum mixing bowls (8.5 in. diameter, 3.0 in. deep, 1.5 qt. capacity) were used to capture and retain spiders associated with ground-litter habitats of Mount Katahdin. The bowls (1-5/site) were buried flush with the soil surface, and partially filled with a killing-preserved agent – a 50:50 mixture of ethylene glycol and 95% ethyl alcohol, plus 1-2 drops of household detergent to reduce surface tension. A metal rain cover fashioned from galvanized sheet metal, with four pre-cut fold-down legs, was used to cover each trap.

The contents of each trap (i.e. trap catches) were retrieved at the end of two separate time periods – 5-27 June 1986 and 27 June-23 July 1986. The trap contents were stored in plastic specimen jars (4 oz.), each containing 70% ethyl alcohol, for transport and storage until examined in the laboratory. In the laboratory adult spiders were sorted out from other trapped arthropods and placed in 2- or 3-dram vials, each containing 70% ethyl alcohol. For multiple-trap sites, all captured specimens of the same species were consolidated.

Sweep Nets

We used standard insect sweep nets to collect spiders from the herbaceous-shrub-small tree layer. These nets included: 1) a Professional Series Insect Net, 12 in. diameter, with muslin netting, and a 36 in. wooden handle; and 2) a Heavy Duty Sweep Net, 15 in. diameter, with sailcloth netting, and a 24 in. handle. Captured spiders were removed from sweep nets by aspirator or by dry vial and transferred to small jars or vials containing 70% ethyl alcohol. No attempts were made to quantify sweep net collections either by volume or vegetative area swept.

Beating Sheet

To collect spiders from woody shrubs and trees, we used a beating sheet (28 x 28 in.) of marine canvas supported by two pivotal cross members (oak). Spiders were dislodged from

limbs and foliage by striking with a maul handle. The dislodged spiders were then captured by aspirator or by dry vial and transferred to vials or small jars each containing 70% ethyl alcohol.

Searches

Spiders also were collected by: searching under rocks, logs, and other ground debris; searching under loose bark of dead trees and stumps; and examining interior and exterior surfaces of buildings. Spiders found in these habitats were captured by aspirator, dry vial, or jar, and transferred to vials containing 70% ethyl alcohol.

Spider Identifications

All collected spiders were taken to the laboratory, placed in small dishes and submerged in alcohol, and examined with stereo-zoom microscopes (e.g. Leica™ MZ-8M 10.0-80.0x magnification), each equipped with fiber-optic lighting. Only adult spiders were identified to species following the species descriptions and keys found in taxonomic literature; see Ubick et al. (2005) and references cited therein. Because the 1986 expedition yielded new, previously undescribed species, a few additional literature sources are cited in this report.

Checklist Arrangement

Spider families, genera, and species are listed in alphabetical order for convenience. Species of Linyphiidae are listed by subfamily per Draney and Buckle (2005). For consistency we follow the currently accepted names as listed in the World Spider Catalog, version 12.5 (Platnick 2012). Species based solely on previously published records are preceded by the symbol (†); those representing a new state record are preceded by (*).

After each listed species, the distribution by realm (Nearctic, Neotropical, Holarctic, etc.) is given, based chiefly on the designations by Buckle et al. (2001) and by Pickavance and Dondale (2005). Next, we list published records (if any) of species previously collected on Mount Katahdin. Because many of the early records refer to outdated species names (i.e. fallen into synonymy), it was necessary to update these older names using the currently accepted name per Platnick (2012). Species synonyms are indicated as [syn]. New records (if any) are given next, and followed by notes or remarks. Most of the new records are based on specimens collected during the 1986 spider-collecting expedition conducted by the authors, whose initials are abbreviated.

Previously unknown species are included in this checklist, if one or more of the specimens used in the species description came from Mount Katahdin. These species are identified in the checklist by the following terms: "holotype – a single specimen designated as the "type" by the author(s) in the original published description of a new species; "paratype" – a specimen, other than the holotype, available to the author(s) at the time a description of the new species was prepared; and "allotype" – a specimen of the opposite sex to the holotype. "Type locality" refers to the place where the holotype specimen was found; in each designated case, this refers to Mount Katahdin.

Collecting Localities, Dates, and Specimen Depositories

All listed collecting localities are within the boundaries of Baxter State Park, Piscataquis County, Maine. Most of the specimens were taken on or near Mount Katahdin in Mount

Katahdin Twp (formerly T3 R9 WELS). A few specimens were taken at Ledge Falls along Nesowadnehunk Stream, and at the Nesowadnehunk Field Gate, both in T4 R10 WELS. For each listed species, the specific collecting locality or localities (if known) are arranged alphabetically and then chronologically within locality. Locality place names are in accordance with those recorded on USGS topographical maps, or as specified in cited sources (e.g. Blake 1927). Unfortunately, many published records do not give specific information about where specimens were collected other than “Mt. Katahdin” or its earlier version “Mt. Ktaadn”. For consistency we use the official USGS place name “Mount Katahdin” unless cited otherwise.

Collection dates are expressed as day, month, year (e.g. 12 July 1986). For pitfall trap catches, both the beginning date (traps set) and ending date (catches retrieved) are listed (e.g. 5-27 June 1986), collectively representing a trapping period.

Representative specimens of recently collected species (i.e. unpublished records) are deposited in the Museum of Comparative Zoology (MCZ), Harvard University in Cambridge, MA, and in the Canadian National Collection (CNC) in Ottawa, ON. Unless given in a cited source, the repositories for many of the earlier collections (i.e. published records) of spiders from Mount Katahdin remain unknown.

Checklist of Mount Katahdin Spiders

AGELENIDAE (2 spp.)

†*Agelenopsis naevia* (Walckenaer, 1841)

Distribution: Nearctic.

Published Record: Blake (1927) collected *Agelena naevia* Walckenaer [syn] at Basin Pond (South Basin), at an elevation of 2,400 feet. He noted that webs of this species were found on low herbs in spruce-fir (*Picea-Abies*) forest openings.

Coras montanus (Emerton, 1890)

Distribution: Nearctic.

New Record: Abol Campground, in web on exterior wall of outdoor toilet, *in copula*, 10 Oct. 1991, DTJ, 1♂, 1♀.

AMAUROBIIDAE (4 spp.)

Amaurobius borealis Emerton, 1909

Distribution: Nearctic.

Published Records: Emerton (1914b) noted that this species was found at 3,000 ft elev. on Mount Katahdin. Leech (1972) recorded this species from: Piscataquis County, Baxter State Park, near Sandy Stream Pond, 1,500 ft elev., (MCZ); Katahdin Camp, 3,000 ft elev. (MCZ). The latter record possibly refers to Emerton’s earlier collection of *Amaurobius borealis* at 3,000 ft elev.

New Record: Basin Pond, ~ 2,450 ft elev., pitfall in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 2♂, 2♀.

Callobius bennetti (Blackwall, 1846)

Distribution: Nearctic.

Published Records: Blake (1927) noted that *Amaurobius sylvestris* Emerton [syn] was among the sub-influents of a spruce-fir (*Picea-Abies*) association at: Basin Pond (South Basin), 2,400 ft elev., “Mt. Ktaadn”. He gave no further details about numbers of specimens or collection dates. Leech (1972) reported *Callobius bennetti* from several localities on Mount Katahdin based on specimens deposited at MCZ. The localities include: Abol Trail, near Chimney Pond, Katahdin Stream Camp, Roaring Brook Campsite, and near Sandy Stream.

New Records: Abol Field, Old YCC Camp, ~ 640 ft elev., on ground among grass, boards, rocks, etc., 3-5 June 1986, DTJ, CDD, JHR, 1♂, 1♀; inside outdoor privy, 5 June 1986, DTJ, 1♂; Basin Pond, ~ 2,450 ft elev., pitfall in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 3♂, 2♀; Chimney Pond Trail below Chimney Pond, ~ 2,900 ft. elev., under loose bark of dead balsam fir, 4 June 1986, DTJ, 1♀; T4 R10 WELS, Ledge Falls, ~ 1,230 ft elev., Nesowadnehunk Stream, under loose bark of dead balsam fir, 16 September 1983, 1♀.

Cybaeopsis euopla (Bishop & Crosby, 1935)

Distribution: Nearctic.

New Record: Grassy Pond, ~ 1,040 ft elev., pitfall in cedar swamp, 5-27 June 1986, DTJ, CDD, JHR, 2♂, 1♀.

Note: This species was previously assigned to the genus *Callioplus*.

Cybaeopsis tibialis (Emerton, 1888)

Distribution: Nearctic.

Published Records: Emerton (1914b) noted that *Amaurobius tibialis* Emerton [syn] was found on Mount Katahdin. Leech (1972) recorded *Callioplus tibialis* (Emerton) [syn] at Katahdin, 3,000 ft elev., (MCZ).

New Record: Basin Pond, ~ 2,450 ft elev., pitfall in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 2♂, 2♀.

Note: This species was previously known as *Callioplus tibialis* (Emerton, 1888).

ARANEIDAE (7 spp.)

†*Aculepeira carbonarioides* (Keyserling, 1892)

Distribution: Holarctic.

Published Records: Emerton (1914b) noted that *Epeira carbonaria* L. Koch [syn] has been found on Mount Katahdin. Blake (1927, 1931) included *Epeira carbonaria* L. Koch [syn] among the spiders he found in a “Rock Associes” at 4,800 ft elev., on the northern slope of Mount Katahdin.

Araneus marmoreus Clerck, 1757

Distribution: Holarctic.

New Records: Abol Trail below slide, ~ 2,000 ft elev., in curled leaf of forb along trail, 4 Aug. 1985, DTJ, NBJ, 1♀; Abol Trail, lower slide area, ~ 3,000 ft elev., in curled leaf of forb along trail, 4 Aug. 1985, DTJ, 1♀.

Araneus nordmanni (Thorell, 1870)

Distribution: Holarctic.

Published Records: Bryant (1908) recorded this species as “*Araneus nordmanni* (Thorell) Comstock” from Mount Katahdin. Emerton (1914b) included Mount Katahdin among the distribution records for *Epeira nordmanni* Thorell, 1870 [syn]. Levi (1971) noted that *A. nordmanni* is found on birch (*Betula* sp.) at Mount Katahdin, Maine.

New Record: T3 R10 WELS, Foster Field Campground, in web under picnic table guarding pink egg sac, 28 Sept. 1983, DTJ, 1♀.

Araniella displicata (Hentz, 1847)

Distribution: Holarctic.

Published Record: Blake (1927) found *Epeira displicata* Hentz [syn] on the tableland below the summit of Mount Katahdin. He noted that this spider preys on insects that feed on plants of the alpine tundra. His observations were made at a station established at 5,060 feet elevation, and he lists this orb-weaver as a sub-influent of a “*Picea-Abies* (Krummholz) Associes”.

New Records: Abol Field, Old YCC Camp, ~ 640 ft elev., beating foliage of 10 white pine (*Pinus strobus*) trees, 3 June 1986, DTJ, 1♂, 1♀; Abol Field, Old YCC Camp, ~ 640 ft elev., sweeping grasses and forbs in open field, 3 June 1986, DTJ, 1♀.

Larinioides patagiatus (Clerck, 1757)

Distribution: Holarctic.

Published Record: Blake (1927) listed *Epeira patagiata* Clerck [syn] among the spiders collected in a pond-bog community near Pamola Pond, 2,700 ft elevation.

New Record: Roaring Brook Campground, inside trail crew cabin in rafters, 12 July 1986, J. W. Snedgen, 1♀.

†*Neoscona arabesca* (Walckenaer, 1841)

Distribution: Nearctic, Neotropical.

Published Record: Blake (1927) included *Epeira trivittata* Keyserling [syn] among the spiders found at Basin Pond (South Basin), 2,400 ft elev., in spruce-fir (*Picea-Abies*) forest. He noted that orb-webs of this species were found in the understory on shrubs and on dead limbs. Berman and Levi (1971) indicate that *Epeira trivittata* Keyserling, 1863 is a junior synonym of *Neoscona arabesca* (Walckenaer, 1841).

†*Zygiella nearctica* Gertsch, 1964

Distribution: Nearctic.

Published Records: Emerton (1914b) noted that *Zilla montana* C. Koch, 1834 [syn] was found on Mount Katahdin, Maine. Blake (1927) noted that *Zilla montana* was found on low trees of a climax spruce-fir (*Picea-Abies*) forest at South Basin, Basin Pond, elevation 2,400 feet. Gertsch (1964) included Mount Katahdin among the distribution records for *Zygiella nearctica*, possibly based on the aforementioned records.

CLUBIONIDAE (8 spp.)

Clubiona bishopi Edwards, 1958

Distribution: Nearctic.

Published Record: Edwards (1958) included Katahdin Stream Camp, Piscataquis County among the distribution records for this species.

New Records: Basin Pond, ~ 2,450 ft elev., pitfall in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 1♂; Basin Pond, ~ 2,450 ft elev., on rock in spruce-fir forest, 24 June 1986, 1♀.

Clubiona canadensis Emerton, 1890

Distribution: Nearctic.

Published Record: Edwards (1958) included Baxter State Park among the locality records for this species, but gave no further details about the specific locality within the Park.

New Record: T4 R10 WELS, Ledge Falls, ~ 1,240 ft elev., Nesowadnehunk Stream, in webbing under picnic table, 28 September, 1983, DTJ, 1♂, 1♀; Nesowadnehunk Field Gate, ~ 1,400 ft elev., beating red spruce (*Picea rubens*) foliage, 16 July 1984, DTJ, 1♂; Abol Trail, ~ 2,400 ft elev., under loose bark of dead spruce (*Picea* sp.) snag, 4 Aug. 1985, DTJ, 1♀; Chimney Pond, ~ 2,900 ft elev., under rocks near pond shore, 24 June 1986, DTJ, 2♀; under loose bark of balsam fir (*Abies balsamea*) and spruce (*Picea* sp.) snags, 22 July 1986, DTJ, 2♀.

†*Clubiona gertschi* Edwards, 1958 – **Allotype**

Distribution: Nearctic.

Published Record: Edwards (1958) designated a female collected by J. H. Emerton in July on Mount Katahdin, Maine as the allotype for this species. The holotype was also taken by J. H. Emerton from: “under stone on Mt. Washington, New Hampshire, July 4, 1907” (*op cit.*).

Remarks: Both specimens are deposited in the arachnid collections at MCZ.

Clubiona kastoni Gertsch, 1941

Distribution: Nearctic.

New Records: Abol Trail below summit, ~ 4,000 ft elev., under rocks in retreats with eggs, 4 August 1985, DTJ, 2♀; Thoreau Spring, ~ 4600 ft elev., under rock in silken retreat, 4 August 1985, DTJ, 1♀.

Clubiona norvegica Strand, 1900

Distribution: Holarctic.

New Record: Chimney Pond, ~ 2,900 ft. elev., under rock near pond shore, in retreat with egg sac, 22 July 1986, DTJ, 1♀.

Clubiona obesa Hentz, 1847

Distribution: Nearctic.

New Records: Hunt Trail between Thoreau Spring and Baxter Peak, ~ 4,800 ft elev., under rocks, some females in silken retreats with egg sacs, 4 August 1985, DTJ, 2♀.

Clubiona praematura Emerton, 1909

Distribution: Holarctic.

Published Records: Edwards (1958) noted that a male and female of this species were taken from the summit of Mount Katahdin.

New Records: Near Caribou Spring, ~ 4,500 ft elev., pitfall traps (3), 26 June-23 July 1986, CDD, JHR, DTJ, 1♂; Near junction of Cathedral and Baxter Peak cut-off trails, ~ 4,700 ft elev., pitfall trap, 26 June-23 July 1986, CDD, JHR, DTJ, 2♂; Tableland near Thoreau Spring, ~ 4,700 ft elev., in retreat under rock guarding egg sac, 12 July 1986, DTJ, 1♀; Tableland Cut-off Trail, ~ 4,600 ft. elev., on ground under rocks, in retreats with egg sacs, 26 June 1986, DTJ, 5♀; on ground under rocks, 23 July 1986, 2♀.

Clubiona trivialis C. L. Koch, 1843

Distribution: Holarctic.

New Record: Near Caribou Spring, ~ 4,500 ft elev., pitfall traps (3), 26 June-23 July 1986, CDD, JHR, DTJ, 1♂, 1♀.

CYBAEIDAE (1 sp.)

†*Cybaeota calcarata* (Emerton, 1911)

Distribution: Nearctic.

Published Record: Emerton (1911) described this species as “*Liocranum calcaratum*, new” and included a record of a male collected on 4 July at Katahdin, Maine.

Remarks: Emerton (1911) also noted that females of this species had been taken in August at “Great Gulf of Mt. Washington” in New Hampshire.

DICTYNIDAE (4 spp.)

Argenna obesa Emerton, 1911

Distribution: Nearctic.

New Record: T4 R10 WELS, Ledge Falls, ~ 1,230 ft elev., Nesowadnehunk Stream, on rock ledge, 17 July 1984, DTJ, 1♂

Cicurina brevis (Emerton, 1890)

Distribution: Nearctic.

New Record: Chimney Pond, ~ 2,900 ft. elev., pitfall in grass near pond, 5-27 June 1986, DTJ, CDD, JHR, 2♂, 1♀.

Dictyna coloradensis Chamberlin, 1919

Distribution: Nearctic.

New Record: Abol Field, Old YCC Camp, ~ 640 ft elev., sweeping grasses and forbs in open field, 3 June 1986, DTJ, 1♀.

Emblyna phylax (Gertsch & Ivie, 1936)

Distribution: Nearctic.

New Record: Nesowadnehunk Field Gate, ~ 1,400 ft elev., beating balsam fir (*Abies balsamea*) foliage, 16 July 1984, DTJ, 1♀.

GNAPHOSIDAE (8 spp.)

**Gnaphosa borea* Kulczyński, 1908

Distribution: Holarctic.

New Records: Near Caribou Spring, ~ 4,500 ft elev., pitfall traps (3), 26 June-23 July 1986, CDD, JHR, DTJ, 1♂; Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 1♂.

†*Gnaphosa brumalis* Thorell, 1875

Distribution: Nearctic.

Published Records: Emerton (1914b) included Katahdin, Maine among the New England collection localities for this species. Furthermore, he indicated that *Gnaphosa brumalis* was very abundant on or near the summits of mountains above treeline. Blake (1927) listed "*Gnathosa* (sic.) *brumalis* Th." among the invertebrates associated with low-growing Krummholz spruce (*Picea mariana*) and fir (*Abies balsamea*) near the summit of "Mount Ktaadn". He noted that this spider was taken under stones and in thick moss.

**Gnaphosa microps* Holm, 1939

Distribution: Holarctic.

New Records: Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 1♂; Cut-off trail near Thoreau Spring, ~ 4,600 ft elev., pitfall traps (3), 26 June-23 July 1986, 3♂.

†*Gnaphosa muscorum* (L. Koch, 1866)

Distribution: Holarctic.

Published Record: Platnick and Shadab (1975) included Mount Katahdin, Piscataquis County, Maine among the distribution records for this species in North America.

Gnaphosa orites Chamberlin, 1922 – **Holotype, type locality**

Distribution: Holarctic.

Published Records: Chamberlin (1922) described this species based on a male collected on Mount Katahdin, Maine, which he designated as the type locality. The holotype specimen resides in the MCZ collections at Harvard University. Platnick and Shadab (1975) also list Mount Katahdin as the type locality for this species.

New Record: Near junction of Cathedral and Baxter Peak cut-off trails, ~ 4,700 ft elev., pitfall trap, 26 June-23 July 1986, CDD, JHR, DTJ, 1♂.

Remarks: Koponen (1987) considered *Gnaphosa orites* more arctic than subarctic-alpine; however, he indicated that this gnaphosid had been found in alpine areas near the summit of Mt. Washington in New Hampshire.

Gnaphosa parvula Banks, 1896

Distribution: Nearctic.

New Record: Basin Pond, ~ 2,450 ft elev., pitfall in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 1♂.

Zelotes fratris Chamberlin, 1920

Distribution: Holarctic.

Published Record: Bryant (1908) included Mount Katahdin, Maine among the collecting localities for *Melanophora atra* (Hentz) Simon [syn].

New Record: Grassy Pond, ~ 1,040 ft elev., pitfall in cedar swamp, 5-27 June 1986, DTJ, CDD, JHR, 1♂, 1♀.

†*Zelotes sula* Lowrie & Gertsch, 1955

Distribution: Holarctic.

Published Record: Platnick and Shadab (1983) included a record of this species collected near Thoreau Spring, Mount Katahdin, Baxter State Park, 12 July 1982, elevation 4,700 feet, under rock guarding pink egg sacs, 3♀.

HAHNIIDAE (3 spp.)

Antistea brunnea (Emerton, 1909)

Distribution: Nearctic.

New Record: Grassy Pond, ~ 1,040 ft elev., pitfall in cedar swamp, 5-27 June 1986, DTJ, CDD, JHR, 4♀

Cryphoeca montana Emerton, 1909

Distribution: Nearctic.

Published Record: Emerton (1914b) included this species among the spiders found on mountains in New England and elsewhere. Mount Katahdin, Maine is among the mountains listed.

New Record: Basin Pond, ~ 2,450 ft elev., pitfall in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 11♂.

Neoantistea magna (Keyserling, 1887)

Distribution: Nearctic.

New Record: Grassy Pond, ~ 1,040 ft elev., pitfall in cedar swamp, 5-27 June 1986, DTJ, CDD, JHR, 2♀.

LINYPHIIDAE, Linyphiinae (22 spp.)

†*Agyneta olivacea* (Emerton, 1882)

Distribution: Holarctic.

Published Record: Emerton (1911) reported that a female of *Microneta olivacea* Emerton [syn] was found by H. C. Britcher on Mount Katahdin, Maine in 1901. Emerton (1914b) noted that *M. olivacea* occurs on several mountains in New England and down to sea level in Maine, and in Labrador.

Remarks: In Newfoundland *A. olivacea* is commonly found in mixed coniferous woods (Pickavance and Dondale 2005).

**Bathyphantes brevipes* (Emerton, 1917)

Distribution: Nearctic.

New Record: Chimney Pond, ~ 2,900 ft. elev., pitfall in grass near pond, 5-27 June 1986, DTJ, CDD, JHR, 1♂, 1♀.

Bathyphantes pallidus (Banks, 1892)

Distribution: Nearctic.

Published Record: Ivie (1969) includes a record of a male collected by J. H. Emerton on 4 July 1910 from Mount Katahdin, Maine.

New Records: Abol Pond, ~ 590 ft elev., pitfall traps (5) in *Sphagnum* bog, 27 June-23 July 1986, CDD, JHR, DTJ, 2♀; 5-27 June 1986, DTJ, CDD, JHR, 1♂; near junction of Cathedral and Baxter Peak cut-off trails, ~ 4,700 ft elev., pitfall trap, 26 June-23 July 1986, CDD, JHR, DTJ, 1♂.

Remarks: The male collected by Emerton is deposited in MCZ at Harvard University.

Bathyphantes reprobus (Kulczyński, 1916)

Distribution: Holarctic.

Published Record: Ivie (1969) includes a record of a male “*Bathyphantes (Bathyphantes) crosbyi* (Emerton)” [syn] collected by J. H. Emerton on 4 July 1910 at Mount Katahdin, Maine.

New Record: Tableland, pitfall at edge of scrub spruce [Krummholz], 5-27 June 1986, DTJ, CDD, JHR, 1♂, 1♀.

Remarks: CDD identified the specimens collected on the Tableland in 1986 as *Bathyphantes crosbyi* (Emerton, 1919), a species he considers distinct from *B. reprobus* (Kulczyński, 1916); see Buckle et al. (2001) and Pickavance and Dondale (2005). Nonetheless, Platnick (2012) continues to list *B. crosbyi* as a synonym of *B. reprobus*. Koponen (1987) considered *B. crosbyi* a subarctic-alpine species associated with alpine sites of Mont du Lac des Cygnes in Québec.

Centromerus longibulbus (Emerton, 1882)

Distribution: Nearctic.

New Record: Grassy Pond, ~ 1,040 ft elev., pitfall in cedar swamp, 5-27 June 1986, CDD, JHR, 2♂, 1♀.

†*Estrandia grandaeva* (Keyserling, 1886)

Distribution: Holarctic.

Published Records: Emerton (1914b) listed *Linyphia nearctica* Banks [syn] from several mountains in New England including Mount Katahdin, Maine. He considered this species to be characteristic of spruce-fir (*Picea-Abies*) forests from 2,500 to 4,500 feet elevation where its flat webs are spun between tree branches up to three or four feet above ground. Blake (1927) included *Linyphia nearctica* Banks [syn] among the spiders associated with low-growing Krummholz trees (*Picea mariana*, *Abies balsamea*) on Mount Katahdin. He noted that this spider was found on spruce along with “*Theridion zelotypum* Emerton”, now a junior synonym of *Theridion pictum* (Walckenaer, 1802).

Frontinella communis (Hentz, 1850)

Distribution: Nearctic.

New Record: Abol Field, Old YCC Camp, ~ 640 ft elev., beating foliage of 10 white pine (*Pinus strobus*) trees, 3 June 1986, DTJ, 1♂.

Improphantes complicatus (Emerton, 1882)

Distribution: Holarctic.

New Record: Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 19♂, 14♀.

Remarks: Emerton (1882) described and placed this species in the genus *Bathyphantes*; however, Zorsch (1937) transferred it to the genus *Lepthyphantes*. And, more recently, Saaristo and Tanasevitch (1996) transferred it to the genus *Improphantes*.

†*Incestophantes duplicatus* (Emerton, 1913) - **Holotype, type locality**

Distribution: Nearctic.

Published Records: Emerton (1913) first described this species as “*Bathyphantes duplicatus* new” based on a male collected at Mount Katahdin, Maine, 2,000 ft elev., 6 July 1910. Zorsch (1937) included a description of the male of *Lepthyphantes duplicata* (Emerton) [syn] and, following Jackson (1933), listed the type locality as: “Mt. Katadin (sic.), Maine. (2000 ft., July 6, 1910)”.

Remarks: The holotype male from Mount Katahdin is deposited at MCZ, Harvard University. Emerton (1913) noted that a female of this species had been taken in August on Mt. Washington in New Hampshire.

**Incestophantes washingtoni* (Zorsch, 1937)

Distribution: Nearctic.

New Record: Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 3♂.

Note: This species was formerly known as *Lepthyphantes washingtoni* Zorsch, 1937.

Kaestneria rufula (Hackman, 1954)

Distribution: Nearctic.

New Record: Abol Pond, ~ 590 ft elev., pitfall traps (5) in *Sphagnum* bog, 27 June-23 July 1986, CDD, JHR, DTJ, 2♀.

Note: This species was formerly known as *Bathyphantes rufulus* Hackman, 1954.

Lepthyphantes alpinus (Emerton, 1882)

Distribution: Holarctic.

Published Record: Emerton (1914b) included *Bathyphantes alpina* Emerton [syn] among the spiders found on Mount Katahdin. He indicated that this species was also found at sea level in eastern Maine and in Labrador.

New Record: Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 1♂.

Lepthyphantes intricatus (Emerton, 1911)

Distribution: Nearctic.

New Record: Basin Pond, ~ 2,450 ft elev., pitfall trap in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 1♂, 1♀.

Lepthyphantes turbatrix (O. P.-Cambridge, 1877)

Distribution: Nearctic.

New Record: Near junction of Cathedral and Baxter Peak cut-off trails, ~ 4,700 ft elev., pitfall trap, 26 June-23 July 1986, CDD, JHR, DTJ, 1♂.

†**Maro nearcticus* Dondale & Buckle, 2001- **Paratype**

Distribution: Nearctic.

Published Record: Dondale and Buckle (2001) noted that a male of this new species was taken at: Basin Pond, Baxter State Park, 5-27 June 1986. This specimen was captured by pitfall trap in a fir (*Abies balsamea*) forest at ~ 2,450 ft elev. (CNC).

Remarks: Dondale and Buckle (2001) designated a male from Mt. Albert, Québec as the holotype, and the male from Mount Katahdin as a paratype. The type specimens are deposited in the arachnid collections at CNC.

†**Meioneta amersaxatilis* (Saaristo & Koponen, 1998) – **Paratype**

Distribution: Nearctic.

Published Record: Saaristo and Koponen (1998) described and placed this species in the genus *Agyneta* and included records of 2♂♂, 1♀ from: “U.S.A., Maine, Baxter State Park, Chimney Pond, pitfalls in grass nr. pond, 5-27 June 1986, D. Jennings, C. Dondale, and J. Redner (in CNC)”.

Remarks: Saaristo and Koponen (1998) designated the two males and one female from Mount Katahdin as paratypes, which are deposited in CNC. They designated a male from Kuujjuarapik, Hudson Bay, Québec as the holotype. Although originally placed in the genus *Agyneta*, Platnick (2012) lists *amersaxatilis* as a species of *Meioneta*.

†**Meioneta jacksoni* Braendegaard, 1937

Distribution: Nearctic.

Published Record: Saaristo and Koponen (1998) listed this species as *Agyneta jacksoni* (Braendegaard, 1937) and included records from: “Maine, Piscataquis Co., Baxter State Park, 4500-4700 ft, 26 June-23 July 1986, ♂♂ ♀♀, C. Dondale, J. Redner, and D. Jennings (in CNC)”.

Remarks: Platnick (2012) lists *A. jacksoni* as a species of *Meioneta*.

Microlinyphia mandibulata (Emerton, 1882)

Distribution: Nearctic.

New Record: Tableland, ~ 4,700 ft elev., on ground; moss-lichens, 26 June 1986, DTJ, 1♀.

Neriene radiata (Walckenaer, 1841)

Distribution: Holarctic.

New Records: Hunt Trail at timberline, found on rocks, 17 August 1985, M. Thompson, 1♀; Basin Pond, ~ 2,450 ft elev., pitfall trap in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 1♂, 1♀.

Oreonetides vaginatus (Thorell, 1872)

Distribution: Holarctic.

New Record: Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 1♂.

Oreophantes recurvatus (Emerton, 1913)

Distribution: Nearctic.

New Record: Grassy Pond, ~ 1,040 ft elev., pitfall in cedar swamp, 5-27 June 1986, DTJ, CDD, JHR, 1♀.

Pityohyphantes costatus (Hentz, 1850)

Distribution: Nearctic.

New Record: Abol Field, Old YCC Camp, ~ 640 ft elev., in web inside outdoor privy, 5 June 1986, DTJ, 1♀.

LINYPHIIDAE, Erigoninae (37 spp.)

Aphileta misera (O. P.-Cambridge, 1882)

Distribution: Holarctic.

New Records: Abol Pond, ~ 590 ft elev., pitfall traps (5) in *Sphagnum* bog, 27 June-23 July 1986, CDD, JHR, DTJ, 5♂, 1♀; near Saddle Spring, ~ 4400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 1♂.

Ceraticelus fissiceps (O. P.-Cambridge, 1874)

Distribution: Nearctic.

New Record: T4 R10 WELS, Ledge Falls, ~ 1,240 ft elev., Nesowadnehunk Stream, sweeping roadside grasses and forbs in spruce-fir forest, 17 July 1984, DTJ, 1♂.

Ceraticelus laetabilis (O. P.-Cambridge, 1874)

Distribution: Nearctic.

New Record: Basin Pond, ~ 2,450 ft elev., pitfall trap in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 1♂.

Ceraticelus minutus (Emerton, 1882)

Distribution: Nearctic.

New Record: Grassy Pond, ~ 1,040 ft elev., pitfall in cedar swamp, 5-27 June 1986, DTJ, CDD, JHR, 2♂, 1♀.

Ceratinella brunnea Emerton, 1882

Distribution: Nearctic.

New Records: Tableland, pitfall at edge of scrub spruce [Krummholz], 5-27 June 1986, DTJ, CDD, JHR, 1♂, 1♀; Basin Pond, ~ 2,450 ft elev., pitfall trap in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 1♀.

Ceratinops annulipes (Banks, 1892)

Distribution: Nearctic.

New Record: Abol Pond, ~ 590 ft elev., pitfall traps (5) in *Sphagnum* bog, 27 June-23 July 1986, CDD, JHR, DTJ, 1♂, 1♀.

Ceratinopsis nigriceps Emerton, 1882

Distribution: Nearctic.

New Record: Nesowadnehunk Field Gate, ~ 1,400 ft elev., beating balsam fir (*Abies balsamea*) foliage, 16 July 1984, DTJ, 1♂, 3♀.

Diplocentria bidentata (Emerton, 1882)

Distribution: Holarctic.

Early Records: Emerton (1914b) included *Tmeticus bidentatus* Emerton [syn] among the spiders found on Mount Katahdin, Maine. He also noted that this species was found on other mountains in New England, and at sea level in Maine and Labrador. Bishop and Crosby (1938) noted Emerton's earlier collection of this species from Mount Katahdin, but as *Scotoussa bidentata* Emerton. Chamberlin and Ivie (1945) also included Emerton's earlier record from Mount Katahdin, but as *Diplocentria bidentata* (Emerton).

New Record: Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 7♂, 1♀.

Diplocentria rectangulata (Emerton, 1915)

Distribution: Holarctic.

New Record: Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 1♂.

Diplocephalus subrostratus (O. P.-Cambridge, 1873)

Distribution: Holarctic.

New Record: Basin Pond, ~ 2,450 ft elev., pitfall trap in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 1♂.

Gonatium crassipalpus Bryant, 1933

Distribution: Nearctic.

New Record: Basin Pond, ~ 2,450 ft elev., pitfall trap in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 1♀.

Grammonota angusta Dondale, 1959

Distribution: Nearctic.

New Record: Basin Pond, ~ 2,450 ft elev., pitfall trap in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 2♂; Nesowadnehunk Field Gate, ~ 1,400 ft elev., beating balsam fir (*Abies balsamea*) foliage, 16 July 1984, DTJ, 1♀; 17 July 1984, DTJ, 1♀.

**Hilaira herniosa* (Thorell, 1875)

Distribution: Holarctic.

New Record: Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 8♂, 3♀.

**Horcotes quadricristatus* (Emerton, 1882)

Distribution: Nearctic.

New Record: Near Caribou Spring, ~ 4,500 ft elev., pitfall traps (3), 26 June-23 July 1986, CDD, JHR, DTJ, 1♀.

**Hypomma marxi* (Keyserling, 1886)

Distribution: Nearctic.

New Record: T4 R10 WELS, Ledge Falls, ~ 1,240 ft elev., Nesowadnehunk Stream, sweeping roadside grasses and forbs in spruce-fir forest, 17 July 1984, DTJ, 1♀.

Hypselistes florens (O. P.-Cambridge, 1875)

Distribution: Holarctic.

New Records: Abol Field, Old YCC Camp, ~ 640 ft elev., sweeping grasses, forbs, and shrubs, open field in mixed forest, 3 June 1986, DTJ, 1♀; Nesowadnehunk Field Gate, ~ 1,400 ft elev., beating balsam fir (*Abies balsamea*) foliage, 17 July 1984, DTJ, 3♀.

Islandiana longisetosa (Emerton, 1882)

Distribution: Nearctic.

New Record: Chimney Pond, ~ 2,900 ft. elev., pitfall in grass near pond, 5-27 June 1986, DTJ, CDD, JHR, 3♂, 3♀.

**Islandiana princeps* Braendegaard, 1932

Distribution: Nearctic.

New Record: Near junction of Cathedral and Baxter Peak cut-off trails, ~ 4,700 ft elev., pitfall traps, 26 June-23 July 1986, CDD, JHR, DTJ, 6♂, 3♀.

Mermessus undulatus (Emerton, 1914)

Distribution: Nearctic.

New Record: Abol Pond, ~ 590 ft elev., pitfall traps (5) in *Sphagnum* bog, 27 June-23 July 1986, CDD, JHR, DTJ, 1♂, 1♀.

Remarks: This species was previously assigned to the genus *Eperigone* Crosby & Bishop, 1928.

Metopobactrus prominulus (O. P.-Cambridge, 1872)

Distribution: Holarctic.

New Record: Near Caribou Spring, ~ 4,500 ft elev., pitfall traps (3), 26 June-23 July 1986, CDD, JHR, DTJ, 31♂, 18♀.

**Oreoneta brunnea* (Emerton, 1882)

Distribution: Nearctic.

New Record: Tableland, cut-off trail, ~ 4,600 ft elev., on ground under rock, 23 July 1986, DTJ, 1♀.

Note: This species was formerly known as *Hilaira frigida brunnea* (Emerton, 1882).

Pocadicnemis americana Millidge, 1976

Distribution: Nearctic.

New Record: Near Caribou Spring, ~ 4,500 ft elev., pitfall traps (3), 26 June-23 July 1986, CDD, JHR, DTJ, 2♂, 2♀.

Scotinotylus pallidus (Emerton, 1882)

Distribution: Nearctic.

New Records: Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 1♂, 1♀; Cut-off trail near Thoreau Spring, ~ 4,600 ft elev., pitfall traps (3), 26 June-23 July 1986, 1♂.

**Semljicola obtusus* (Emerton, 1915)

Distribution: Nearctic.

New Record: Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 1♂, 7♀.

Sisicottus montanus (Emerton, 1882)

Distribution: Nearctic.

Early Record: Emerton (1914b) included *Tmeticus montanus* Emerton [syn] among the spiders found on Mount Katahdin, and noted that this species was also found at sea level in eastern Maine and in Labrador.

New Records: Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 6♂, 10♀; Cut-off trail near Thoreau Spring, ~ 4600 ft elev., pitfall traps (3), 26 June-23 July 1986, 1♀.

Tapinocyba minuta (Emerton, 1909)

Distribution: Nearctic.

New Records: Near Caribou Spring, ~ 4,500 ft elev., pitfall traps (3), 26 June-23 July 1986, CDD, JHR, DTJ, 1♂; Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 2♂, 1♀.

Tapinocyba simplex (Emerton, 1882)

Distribution: Nearctic.

New Record: Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 1♀.

Tunagyna debilis (Banks, 1892)

Distribution: Holarctic.

New Records: Abol Field, Old YCC Camp, ~ 640 ft elev., on ground among grass, stones, boards, etc., 3-5 June 1986, CDD, JHR, DTJ, 1♀; Abol Pond, ~ 590 ft elev., pitfall traps (5) in *Sphagnum* bog, 27 June-23 July 1986, DTJ, CDD, JHR, 1♀; Basin Pond, ~ 2,450 ft elev., pitfall in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 3♂, 4♀.

**Wabasso cacuminatus* Millidge, 1984

Distribution: Holarctic.

New Record: Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 1♂, 1♀.

**Wabasso quaestio* (Chamberlin, 1949)

Distribution: Holarctic.

New Record: Chimney Pond, ~ 2,900 ft. elev., pitfall in grass near pond, 5-27 June 1986, DTJ, CDD, JHR, 4♂, 4♀.

Walckenaeria castanea (Emerton, 1882)

Distribution: Nearctic.

New Record: Basin Pond, ~ 2,450 ft elev., pitfall in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 3♀.

**Walckenaeria clavicornis* (Emerton, 1882)

Distribution: Nearctic.

New Record: Near junction of Cathedral and Baxter Peak cut-off trails, ~ 4,700 ft elev., pitfall trap, 26 June-23 July 1986, CDD, JHR, DTJ, 1♀.

Walckenaeria communis (Emerton, 1882)

Distribution: Nearctic.

New Records: Near Caribou Spring, ~ 4,500 ft elev., pitfall traps (3), 26 June-23 July 1986, CDD, JHR, DTJ, 1♀; Grassy Pond, ~ 1040 ft elev., pitfall in cedar swamp, 5-27 June 1986, DTJ, CDD, JHR, 3♀.

**Walckenaeria cuspidata brevicula* (Crosby & Bishop, 1931)

Distribution: Nearctic.

New Record: Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 1♀.

Walckenaeria exigua Millidge, 1983

Distribution: Nearctic.

New Record: Basin Pond, ~ 2,450 ft elev., pitfall in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 3♂, 1♀.

**Walckenaeria fusiceps* Millidge, 1983

Distribution: Nearctic.

New Record: Chimney Pond, ~ 2,900 ft. elev., pitfall in grass near pond, 5-27 June 1986, DTJ, CDD, JHR, 4♀.

Zornella cultrigera (L. Koch, 1879)

Distribution: Holarctic.

New Records: Near Caribou Spring, ~ 4,500 ft elev., pitfall traps (3), 26 June-23 July 1986, CDD, JHR, DTJ, 1♂; Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 2♂, 2♀.

Remarks: Hackman (1954) included *Zornella cultrigera* among the arctic species of Newfoundland; Koponen (1987) noted that *Z. cultrigera* inhabited subarctic-alpine sites on Mont du Lac des Cygnes in Québec.

LYCOSIDAE (17 spp.)

Alopecosa aculeata (Clerck, 1757)

Distribution: Holarctic.

New Record: Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 2♂, 1♀.

Arctosa alpigena (Doleschall, 1852)

Distribution: Holarctic.

Published Records: Bryant (1908), Emerton (1914b), and Blake (1927) noted that *Lycosa albohastata* Emerton [syn] was found on Mount Katahdin; however, only Blake included specific information about locality and habitat. He found this lycosid spider at a station established in a steep slide area of South Basin, 3,450 feet elevation.

New Records: Near junction of Cathedral and Baxter Peak cut-off trails, ~ 4,700 ft elev., pitfall trap, 26 June-23 July 1986, CDD, JHR, DTJ, 1♂, 1♀; Near Caribou Spring, ~ 4,500 ft elev., pitfall traps (3), 26 June-23 July 1986, CDD, JHR, DTJ, 13♂, 7♀; Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 1♂, 1♀; Cut-off trail near Thoreau Spring, ~ 4,600 ft elev., pitfall traps (3), 26 June-23 July 1986, 2♀.

Remarks: Koponen (1987) indicated that *Arctosa alpigena* has a more arctic than subarctic-alpine distribution, and has been found in large alpine areas on Mt. Washington in New Hampshire and Mont Albert in Québec.

Pardosa albomaculata Emerton, 1885

Distribution: Nearctic.

Published Records: Bryant (1908), Emerton (1914b), and Blake (1927) listed records of “*Pardosa groenlandica* Thorell” from Mount Katahdin, Maine; however, these listings probably refer to *Pardosa albomaculata* Emerton, 1885 – see “Uncertain Names and Records” below. Dondale and Redner (1990) included a distribution symbol (Map 50) for this species collected on Mount Katahdin in 1986.

New Record: Near junction of Cathedral and Baxter Peak cut-off trails, ~ 4,700 ft elev., on ground among rocks, 23 July 1986, DTJ, 1♂, 1♀.

Remarks: This species is widely distributed in arctic and subarctic regions; it also has been taken from alpine summits of Mt. Washington in New Hampshire and Mont du Lac des Cygnes in Québec (Koponen 1987).

Pardosa concinna (Thorell, 1877)

Distribution: Nearctic.

Published Records: Emerton (1914b) noted that *Pardosa muscicola* Emerton [syn] was found on mountain tops, including Mount Katahdin, down to and below the tree line. Blake (1927) also referred to this species as *Pardosa muscicola* Emerton [syn] and concluded that it was a sub-influent of the tableland “alpine tundra” below the summit of “Mt. Ktaadn” at an elevation of 5,060 ft.

New Records: Near Caribou Spring, ~ 4,500 ft elev., pitfall traps (3), 26 June-23 July 1986, CDD, JHR, DTJ, 45♂, 2♀; Near junction of Cathedral and Baxter Peak cut-off trails, ~ 4,700 ft elev., pitfall trap, 26 June-23 July 1986, CDD, JHR, DTJ, 1♂; Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 13♂; Cut-off trail near Thoreau Spring, ~ 4,600 ft elev., pitfall traps (3), 26 June-23 July 1986, 1♂.

Remarks: Hackman (1954) listed *Pardosa concinna* as arctic-boreal in Newfoundland; Koponen (1987) included this species among the spiders inhabiting subarctic-alpine regions of Mont du Lac des Cygnes in Québec.

Pardosa distincta (Blackwall, 1846)

Distribution: Nearctic

New Records: Abol Field, Old YCC Camp, ~ 640 ft elev., sweeping grasses, forbs, and shrubs, open field in mixed forest, 27 June 1986, DTJ, 1♂; Abol Field, Old YCC Camp, ~ 640 ft elev., on ground in grass and moss, 3 June 1986, DTJ, 3♂, 3♀.

Pardosa hyperborea (Thorell, 1872)

Distribution: Holarctic.

New Records: Near Caribou Spring, ~ 4,500 ft elev., pitfall traps (3), 26 June-23 July 1986, CDD, JHR, DTJ, 2♂; Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 8♂; Tableland, pitfall at edge of scrub spruce [Krummholz], 5-27 June 1986, DTJ, CDD, JHR, 3♂, 5♀; Cut-off trail near Thoreau Spring,

~ 4,600 ft elev., on ground in moss-lichens; DTJ, 2♀; Cut-off trail near Thoreau Spring, ~ 4,600 ft elev., pitfall traps (3), 26 June-23 July 1986, 1♂, 1♀.

Remarks: Hackman (1954) listed *Pardosa hyperborea* as arctic-boreal in Newfoundland.

Pardosa mackenziana (Keyserling, 1877)

Distribution: Nearctic.

Published Records: Emerton (1914b) noted that *Pardosa uncata* Thorell, 1877 [syn] lives on mountain-tops, including Mount Katahdin, down to and below the trees. Blake (1927) listed *Pardosa uncata* Thorell as a sub-influent of the tundra heaths near the summit of "Mt. Ktaadn".

New Records: Basin Pond, ~ 2,450 ft elev., pitfall in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 7♂, 2♀; Near Caribou Spring, ~ 4,500 ft elev., pitfall traps (3), 26 June-23 July 1986, CDD, JHR, DTJ, 1♀; Trail between Chimney and Basin Ponds, on rock in spruce-fir mixed hardwoods, 26 June 1986, DTJ, 1♀; Chimney Pond trail above Basin Pond, on trail, 22 July 1986, 1♂; Grassy Pond, ~ 1,040 ft elev., pitfall in cedar swamp, 5-27 June 1986, DTJ, CDD, JHR, 10♂; Katahdin Stream Campground, ~ 1,100 ft elev., among rocks along Katahdin Stream, 5 June 1986, DTJ, 2♀; Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 3♂; Tableland, ~ 4,700 ft elev., on ground; moss-lichens, 26 June 1986, DTJ, 1♂; Cut-off trail near Thoreau Spring, ~ 4,600 ft elev., pitfall traps (3), 26 June-23 July 1986, 9♂, 1♀.

Remarks: Emerton (1914b) misidentified this lycosid from Mount Katahdin as "*Pardosa uncata* Thorell, 1877", a western species according to Lowrie and Dondale (1981).

Pardosa milvina (Hentz, 1844)

Distribution: Nearctic.

New Record: Chimney Pond, ~ 2,900 ft. elev., among rocks along pond edge and dry stream bed, 22 July 1986, DTJ, 1♀.

Pardosa moesta Banks, 1892

Distribution: Nearctic.

New Records: Abol Field, Old YCC Camp, ~ 640 ft elev., on ground in grass and moss, 3 June 1986, DTJ, 1♀; Near Caribou Spring, ~ 4,500 ft elev., pitfall traps (3), 26 June-23 July 1986, CDD, JHR, DTJ, 2♂, 1♀; Near junction of Cathedral and Baxter Peak cut-off trails, ~ 4,700 ft elev., pitfall traps (3), 26 June-23 July 1986, CDD, JHR, DTJ, 6♂, 2♀; Chimney Pond, ~ 2,900 ft. elev., pitfall in grass near pond, 5-27 June 1986, DTJ, CDD, JHR, 33♂, 6♀; Grassy Pond, ~ 1,040 ft elev., pitfall in cedar swamp, 5-27 June 1986, DTJ, CDD, JHR, 1♂, 1♀; Katahdin Stream Campground, ~ 1,100 ft elev., among rocks along Katahdin Stream near road, 5 June 1986, DTJ, 1♀; Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July 1986, CDD, JHR, DTJ, 13♂, 3♀; Tableland, pitfall at edge of scrub spruce [Krummholz], 5-27 June 1986, DTJ, CDD, JHR, 3♂, 1♀; Cut-off trail near Thoreau Spring, ~ 4,600 ft elev., pitfall traps (3), 26 June-23 July 1986, 6♂, 1♀.

Pardosa uintana Gertsch, 1933

Distribution: Nearctic.

New Record: Tableland, pitfall at edge of scrub spruce [Krummholz], 5-27 June 1986, DTJ, CDD, JHR, 1♂.

Remarks: Lowrie and Dondale (1981) indicated by map symbol that the distribution of this species included Maine; however, the specific locality was not given.

Pardosa xerampelina (Keyserling, 1877)

Distribution: Nearctic.

New Records: Abol Beach, among rocks along Abol Stream, 3 June 1986, DTJ, 1♂; Abol Field, Old YCC Camp, ~ 640 ft elev., among rocks at edge of open field, 3 June 1986, DTJ, 1♀; Abol Trail, slide area, ~ 3,000 ft elev., on rock, 4 Aug. 1985, DTJ, 1♀; Abol Pond, ~ 590 ft elev., pitfall traps (5) in *Sphagnum* bog, 27 June-23 July 1986, CDD, JHR, DTJ, 1♀; Basin Pond, ~ 2,450 ft elev., pitfall in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 8♂, 8♀; Near Caribou Spring, ~ 4,500 ft elev., pitfall traps (3), 26 June-23 July 1986, CDD, JHR, DTJ, 1♂; Chimney Pond, ~ 2,900 ft. elev., under rocks along pond shore, 24 June 1986, DTJ, 1♂, 2♀; Chimney Pond Trail above Basin Pond, on trail, 22 July 1986, DTJ, 1♂; Chimney Pond, ~ 2,900 ft. elev., among rocks along pond edge and dry stream bed, 22 July 1986, DTJ, 1♂; 9♀; Grassy Pond, ~ 1,040 ft elev., on ground, river bank, 5 June 1986, CDD, JHR, DTJ, 9♀; Hunt Trail above Thoreau Spring, ~ 4,800 ft elev., on rock, 4 August 1985, DTJ, 1♀; among rocks and sub-alpine vegetation, 4 August 1985, DTJ, 1♂; Katahdin Stream Campground, ~ 1,100 ft elev., among rocks along Katahdin Stream near road, 5 June 1986, DTJ, 2♂, 3♀; Near Saddle Spring, ~ 4,400 ft elev., pitfall traps (4), 26 June-23 July

1986, CDD, JHR, DTJ, 1♂, 1♀; Cut-off trail near Thoreau Spring, ~ 4,600 ft elev., pitfall traps (3), 26 June-23 July 1986, 1♂; T4 R10 WELS, Ledge Falls, ~ 1,230 ft elev., Nesowadnehunk Stream, among rocks along stream, 17 July 1984, DTJ, 3♀.

Pirata montanus Emerton, 1885

Distribution: Holarctic.

New Record: Grassy Pond, ~ 1,040 ft elev., pitfall in cedar swamp, 5-27 June 1986, DTJ, CDD, JHR, 3♂, 4♀.

Pirata piraticus (Clerck, 1757)

Distribution: Holarctic.

New Record: Abol Pond, ~ 590 ft elev., pitfall traps (5) in *Sphagnum* bog, 27 June-23 July 1986, CDD, JHR, DTJ, 1♂.

**Piratula canadensis* (Dondale & Redner, 1981)

Distribution: Holarctic.

New Record: Abol Pond, ~ 590 ft elev., pitfall traps (5) in *Sphagnum* bog, 27 June-23 July 1986, CDD, JHR, DTJ, 1♂.

Note: This species was formerly assigned to the genus *Pirata* Sundevall, 1833.

Piratula insularis (Emerton, 1885)

Distribution: Holarctic.

New Record: Abol Pond, ~ 590 ft elev., pitfall traps (5) in *Sphagnum* bog, 27 June-23 July 1986, CDD, JHR, DTJ, 2♂.

Note: This species was formerly assigned to the genus *Pirata* Sundevall, 1833.

Piratula minuta (Emerton, 1885)

Distribution: Holarctic.

New Record: Tableland, ~ 4,700 ft elev., on ground among shrubs, 26 June 1986, DTJ, JHR, CDD, 1♂, 1♀.

Note: This species was formerly assigned to the genus *Pirata* Sundevall, 1833.

Trochosa terricola Thorell, 1856

Distribution: Holarctic.

New Records: Chimney Pond, ~ 2,900 ft. elev., pitfall in grass near pond, 5-27 June 1986, DTJ, CDD, JHR, 8♂, 2♀; under rocks near pond shore, 22 July 1986, DTJ, 2♀; Katahdin Stream Campground, ~ 1,100 ft elev., among rocks along Katahdin Stream, in shallow burrow, 5 June 1986, DTJ, 1♂.

PHILODROMIDAE (7 spp.)

Philodromus exilis Banks, 1892

Distribution: Nearctic.

Published Record: Dondale and Redner (1968) recorded this species from “Top of Mt. Katahdin” in Maine, but gave no further details about the collector, habitat, or collection date.

New Record: Abol Field, Old YCC Camp, ~ 640 ft elev., beating foliage of 10 white pine (*Pinus strobus*) trees, 3 June 1986, DTJ, 1♀.

Philodromus pernix Blackwall, 1846

Distribution: Nearctic.

Published Record: Dondale (1961) noted that this species was taken from “top of Mount Katahdin” in Maine, but gave no further details.

New Record: Hunt Trail between Thoreau Spring and Baxter Peak summit, ~ 4,800 ft elev., on rock, 4 August 1985, DTJ, 1♀.

Philodromus placidus Banks, 1892

Distribution: Nearctic.

New Record: Near Nesowadnehunk Field Gate, ~ 1,400 ft elev., beating white spruce (*Picea glauca*) foliage, 16 July 1984, DTJ, 1♀.

†*Philodromus praelustris* Keyserling, 1880

Distribution: Nearctic.

Published Record: Dondale (1961) recorded this species from “top of Mount Katahdin” in Maine.

Philodromus rufus vibrans Dondale, 1964

Distribution: Nearctic.

New Record: Abol Field, Old YCC Camp, ~ 640 ft elev., sweeping grasses and forbs in open field, 27 June 1986, DTJ, 1♀.

Thanatus rubicellus Mello-Leitão, 1929

Distribution: Nearctic.

Published Record: Dondale et al. (1964) included a record of this species from Mount Katahdin, Maine.

New Record: Tableland near Thoreau Spring, ~ 4,700 ft elev., under rock guarding egg sac, 12 July 1982, DTJ, 1♀.

Tibellus oblongus (Walckenaer, 1802)

Distribution: Holarctic.

New Record: Abol Field, Old YCC Camp, ~ 640 ft elev., beating foliage of 10 white pine (*Pinus strobus*) trees, 3 June 1986, DTJ, 1♀.

PISAURIDAE (1 sp.)

†*Dolomedes triton* (Walckenaer, 1837)

Distribution: Nearctic.

Published Record: Blake (1927, 1931) noted that *Dolomedes sexpunctatus* Hentz [syn] was collected from a pond-bog near Pamola Pond, Mount Katahdin, at an elevation of 2,700 feet.

Remarks: The synonymy of *Dolomedes sexpunctatus* Hentz, 1845 with *D. triton* (Walckenaer, 1837) is discussed in detail by Carico (1973).

SALTICIDAE (3 spp.)

†*Dendryphantas nigromaculatus* (Keyserling, 1885)

Distribution: Nearctic.

Published Record: Kaston (1973) noted that the only eastern representatives of *Eris nigromaculata* (Keyserling) [syn] were collected in the White Mountains of New Hampshire and on Mount Katahdin in Maine.

Evarcha hoyi (Peckham & Peckham, 1883)

Distribution: Nearctic.

New Record: Abol Field, Old YCC Camp, ~ 640 ft elev., sweeping grasses and forbs in open field, 3 June 1986, DTJ, 1♂.

Pelegrina flavipes (Peckham & Peckham, 1888)

Distribution: Nearctic.

New Records: Abol Field, Old YCC Camp, ~ 640 ft elev., beating foliage of 10 white pine (*Pinus strobus*) trees, 3 June 1986, DTJ, 2♂, 4♀; Nesowadnehunk Field Gate, ~ 1,400 ft elev., beating balsam fir (*Abies balsamea*) foliage, 16 July 1984, DTJ, 1♂, 3♀.

TETRAGNATHIDAE (4 spp.)

Meta ovalis (Gertsch, 1933)

Distribution: Nearctic.

New Record: Roaring Brook Campground, inside cabin on back porch, 7 July 1986, J. W. Snedgen, 1♂.

†*Tetragnatha extensa* (Linnaeus, 1758)

Distribution: Holarctic.

Published Record: Blake (1927) included this species among the spiders associated with a pond-bog community near Pamola Pond, at an elevation of 2,700 feet. He found webs of this species on branches of dead spruce, and indicated that the webs contained mostly remains of chironomids.

Tetragnatha laboriosa Hentz, 1850

Distribution: Nearctic.

New Record: Abol Field, Old YCC Camp, ~ 640 ft elev., sweeping grasses, forbs, and shrubs, open field in mixed forest, 27 June 1986, DTJ, 3♀.

Tetragnatha versicolor Walckenaer, 1841

Distribution: Nearctic.

New Records: T4 R10 WELS, Ledge Falls, ~ 1,240 ft elev., Nesowadnehunk Stream, sweeping roadside grasses and forbs in spruce-fir forest, 17 July 1984, DTJ, 2♀; [locality?], inside truck, 27 June 1986, G. F. Hamer, 1♀.

Theridiidae (10 spp.)

Canalidion montanum (Emerton, 1882)

Distribution: Nearctic.

New Records: Nesowadnehunk Field Gate, ~ 1,400 ft elev., beating balsam fir (*Abies balsamea*) foliage, 16 July 1984, DTJ, 2♀; beating *Picea rubens* foliage, 16 July 1984, DTJ, 2♀; beating white spruce (*Picea glauca*) foliage, 16 July 1984, DTJ, 2♀.

Remarks: This species was previously known as *Theridion montanum* Emerton, 1882.

†*Neospintharus trigonum* (Hentz, 1850)

Distribution: Nearctic.

Published Record: Exline and Levi (1962) include a record of *Argyrodes trigonum* (Hentz, 1850) [syn] based on a juvenile collected by H. L. Levi at Katahdin Stream Camp.

Remarks: *Neospintharus trigonum* is a kleptoparasite that invades and steals prey from other web-spinning spiders.

Parasteatoda tepidariorum (C. L. Koch, 1841)

Distribution: Cosmopolitan.

New Record: Foster Field Campground, in web under picnic table, 28 September 1983, DTJ, 1♀.

Remarks: An introduced species of unknown origin; formerly known as *Achaeearanea tepidariorum* (C. L. Koch, 1841).

Robertus borealis (Kaston, 1946)

Distribution: Nearctic.

New Record: Grassy Pond, ~ 1,040 ft elev., pitfall in cedar swamp, 5-27 June 1986, DTJ, CDD, JHR, 1♂.

Robertus riparius (Keyserling, 1886)

Distribution: Nearctic.

New Record: Basin Pond, ~ 2,450 ft elev., pitfall in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 1♂.

Steatoda borealis (Hentz, 1850)

Distribution: Nearctic.

New Records: T3 R10 WELS, Foster Field Campground, in web under picnic table, 28 September 1983, 1♀; Grassy Pond Trail, ~ 1,040 ft elev., [on] wall of metal culvert, 5 June 1986, JHR, 1♂; Abol Field, Old YCC Camp, ~ 640 ft elev., on ground among grass, boards, rocks, etc., 3-5 June 1986, DTJ, CDD, JHR, 1♀.

Theonoe stridula Crosby, 1906

Distribution: Nearctic.

New Record: Abol Pond, ~ 590 ft elev., pitfall traps (5) in *Sphagnum* bog, 27 June-23 July 1986, CDD, JHR, DTJ, 1♂, 1♀.

Theridion differens Emerton, 1882

Distribution: Nearctic.

New Record: Nesowadnehunk Field Gate, ~ 1,400 ft elev., beating balsam fir (*Abies balsamea*) foliage, 16 July 1984, DTJ, 1♀

Theridion frondeum Hentz, 1850

Distribution: Nearctic.

New Records: Nesowadnehunk Field Gate, ~ 1,400 ft elev., sweeping roadside grasses and forbs in spruce-fir forest, 17 July 1984, DTJ, 1♀; Abol Field, Old YCC Camp, ~ 640 ft elev., sweeping grasses, forbs, and shrubs, open field in mixed forest, 27 June 1986, DTJ, 4♀.

†*Theridion pictum* (Walckenaer, 1802)

Distribution: Holarctic.

Published Records: Emerton (1914b) included Mount Katahdin, Maine among the northern localities for *Theridion zelotypum* Emerton, 1882 [syn], and further noted that this theridiid spider “extends through the Maine Woods and is common all over northern and eastern Maine...” Blake (1927) included *Theridion zelotypum* Emerton among the spiders associated with low-growing Krummholz trees below the summit of Mount Katahdin.

THOMISIDAE (7 spp.)

†*Mecaphesa asperata* (Hentz, 1847)

Distribution: Nearctic, Neotropical.

Published Record: Blake (1927) included *Misumena asperata* Emerton [syn] among the spiders associated with a pond-bog near Pamola Pond, at an elevation of 2,700 feet.

Remarks: This crab spider is known best by its former name, *Misumenops asperatus* (Hentz, 1847).

Misumena vatia (Clerck, 1757)

Distribution: Holarctic.

Published Record: Blake (1927) collected this crab spider in a pond-bog near Pamola Pond, elevation 2,000 feet. He noted that *Misumena vatia* lives and breeds on *Kalmia*.

New Records: Abol Field, Old YCC Camp, ~ 640 ft elev., sweeping grasses and forbs in open field, 3 June 1986, DTJ, 1♀; Abol Field, Old YCC Camp, ~ 640 ft elev., sweeping grasses, forbs, and shrubs, open field in mixed forest, 27 June 1986, DTJ, 2♂; Nesowadnehunk Group Area, on ox-eye daisy (*Leucanthemum vulgare*) in field with yellow and orange flowers, 10 July 1977, DTJ, 1♀.

Ozyptila distans Dondale & Redner, 1975

Distribution: Nearctic.

New Record: Grassy Pond, ~ 1,040 ft elev., pitfall trap in cedar swamp, 5-27 June 1986, DTJ, CDD, JHR, 1♂.

Xysticus britcheri Gertsch, 1934

Distribution: Holarctic.

New Record: Grassy Pond, ~ 1,040 ft elev., pitfall in cedar swamp, 5-27 June 1986, DTJ, CDD, JHR, 1♂.

Xysticus luctuosus (Blackwall, 1836)

Distribution: Holarctic.

New Record: Basin Pond, ~ 2,450 ft elev., pitfall in fir forest, 5-27 June 1986, DTJ, CDD, JHR, 2♂.

**Xysticus obscurus* Collett, 1877

Distribution: Holarctic.

New Record: Grassy Pond, ~ 1,040 ft elev., pitfall in cedar swamp, 5-27 June 1986, DTJ, CDD, JHR, 1♂.

Xysticus punctatus Keyserling, 1880

Distribution: Nearctic.

New Record: Near junction of Cathedral and Baxter Peak cut-off trails, ~ 4,700 ft elev., pitfall trap, 26 June-23 July 1986, CDD, JHR, DTJ, 1♂.

Uncertain Names and Records

ARANEIDAE

Araneus bicentenarius (McCook, 1888)

Distribution: Nearctic.

Remarks: Bryant (1908) indicated that *Araneus angulatus* Linné, 1758 [= *Araneus angulatus* Clerck, 1757] was found on Mount Katahdin. According to Levi (1971), *A. angulatus* is a Eurasian species, “often mistakenly used in published collections and literature for *A. bicentenarius* (McCook, 1888)”, a Nearctic species. A more recent collection is needed to verify the presence of this species on Mount Katahdin.

Metepeira palustris Chamberlin & Ivie, 1942

Distribution: Nearctic.

Remarks: Emerton (1915) noted that a bog variety of *Epeira labyrinthea* Hentz [syn] was taken at Lunksoos, east of Mount Katahdin. According to Levi (1977), Emerton’s “bog variety” of *E. labyrinthea* is a junior synonym of *Metepeira grandiosa* Chamberlin & Ivie, 1942, and more specifically, the subspecies *palustris*. Dondale et al. (2003) elevated this subspecies to full species status. The inclusion of *M. palustris* in this checklist remains questionable since Lunksoos Stream, Lunksoos Lake, and Lunksoos Mountain are all located ca. 13-14 miles northeast of Baxter State Park in T4 R7 WELS. If this orb-weaving spider occurs within the Park, most likely it will be found in or near a bog or other wetland.

GNAPHOSIDAE

Micaria pulicaria (Sundevall, 1831)

Distribution: Holarctic.

Remarks: Platnick and Shadab (1988) included Piscataquis County, Maine among the distribution records for this species; however, a specific locality was not mentioned. Nonetheless, a plotted map symbol (Map 1, *op cit.*) for this species in north-central Maine approximates the location of Mount Katahdin.

Zelotes fratris Chamberlin, 1920

Distribution: Holarctic.

Remarks: Platnick and Shadab (1983) noted that *Zelotes fratris* was found in Piscataquis County, Maine, but did not specify Baxter State Park or Mount Katahdin. Nonetheless, their plotted distribution for this species includes a symbol at about the same location as Mount Katahdin (*op cit.* Map 1). Further collecting no doubt will yield specimens of this species.

Zelotes puritanus Chamberlin, 1922

Distribution: Holarctic.

Remarks: Platnick and Shadab (1983) noted that *Zelotes puritanus* was found in Piscataquis County, Maine, but did not specify locality. Their plotted distribution for this species includes a symbol in northern Maine west of Mount Katahdin (*op cit.* Map 21).

LINYPHIIDAE, Linyphiinae

Lepthyphantes sp.

Distribution: Unknown.

Remarks: Blake (1927) included a spider identified by J. H. Emerton as “*Lepthyphantes* sp.” which was taken from a rock association at 4,800 feet elevation on Mount Katahdin. Later, Blake (1931) indicated that a “sheet-web weaver of the genus *Lepthyphantes* constructed their webs between stones, a necessary protection against the wind”. Blake’s record is not included in this checklist because it was not identified to species.

LINYPHIIDAE, Erigoninae

Mermessus entomologicus (Emerton, 1911)

Distribution: Nearctic.

Remarks: Millidge (1987) included Piscataquis County, Maine among the distribution records for *Eperigone entomologica* (Emerton) [syn], with a plotted symbol (Map 9) for this species in northern Maine. However, he did not give the specific locality within Piscataquis County.

Mermessus maculatus (Banks, 1892)

Distribution: Holarctic.

Remarks: Millidge (1987) included Piscataquis County, Maine among the distribution records for *Eperigone maculata* (Banks) [syn], with a plotted symbol (Map 8) for this species in northern Maine; however, he did not give a specific locality.

Mermessus trilobatus (Emerton, 1882)

Distribution: Holarctic.

Remarks: Millidge (1987) included Piscataquis County, Maine among the distribution records for *Eperigone trilobata* (Emerton) [syn], with a plotted symbol (Map 1) approximating Mount Katahdin in northern Maine. Nonetheless, Millidge did not give a specific locality within Piscataquis County.

LYCOSIDAE

Alopecosa pictilis (Emerton, 1885)

Distribution: Holarctic.

Remarks: In reference to *Lycosa pictilis* [syn] collected in northern Labrador, Emerton (1914a, p. 117) stated: “a species before only known from the top of Mt. Washington”. However, in the accompanying distribution table (*op cit.*, p. 118) Emerton listed “Katahdin, 3,000 feet” for *Lycosa pictilis*, an apparent contradiction of his statement in the text. Although we suspect that *Alopecosa pictilis* may indeed occur on Mount Katahdin, its presence needs to be confirmed.

Pardosa groenlandica (Thorell, 1872)

Distribution: Nearctic.

Remarks: Bryant (1908) listed “*Pardosa groenlandica* (Thorell) Emerton” from Mount Katahdin, Maine. Emerton (1914b) listed “*Pardosa groenlandica*, Thorell, 1872” from Mt. Washington and Mount Katahdin, and noted that this species prefers barren rocks. Emerton further indicated that “*Pardosa albomaculata* Emerton” is a junior synonym of *P. groenlandica*. Blake (1927) found “*Pardosa groenlandica* (Th.)” on the northern slope of Mount Ktaadn at an elevation of 4,800 feet, and furthermore noted that it was “a true inhabitant of this rock region and ... is very sensitive to footfalls on the rocks, disappearing into crevices when disturbed.” James H. Emerton identified the spiders collected by Irving H. Blake on “Mt. Ktaadn” and elsewhere in Maine.

We suspect that the aforementioned records all refer to *Pardosa albomaculata* Emerton, 1885 instead of *P. groenlandica* (Thorell, 1872), a thesis supported by Kronstedt’s (1975) revisionary work. The habitat associations of these two *Pardosa* species are distinct in Maine – i.e. *P. groenlandica* lives on cobble and pebble beaches at sea level (Jennings and Graham, Jr. 2007); whereas, *P. albomaculata* is found on talus slopes and rock balds of mountains.

SALTICIDAE

Chalcoscirtus alpicola (L. Koch, 1876)

Distribution: Holarctic.

Remarks: Cutler (1990) noted that the salticid *Chalcoscirtus alpicola* (L. Koch, 1876) should be looked for on high mountains of the northeast including Mount Katahdin in Maine.

THERIDIIDAE

Rugathodes sexpunctatus (Emerton, 1882)

Distribution: Holarctic.

Remarks: Levi (1957) included a record of *Theridion sexpunctatum* Emerton [= *Rugathodes sexpunctatus* (Emerton, 1882)] from Piscataquis County, Maine, but without a specific locality. However, his plotted map symbol (Map 33, *op cit.*) for this species approximates the location of Mount Katahdin.

Steatoda borealis (Hentz, 1850)

Distribution: Nearctic.

Remarks: Levi (1957) included a record of this species from Piscataquis County, Maine, but not specifically on Mount Katahdin. However, his plotted map symbol (Map 19, *op cit.*) for this theridiid spider approximates the location of Mount Katahdin. No doubt additional collecting will yield specimens of this species often found associated with loose bark of trees and stumps.

Theridion murarium Emerton, 1882

Distribution: Nearctic.

Remarks: Levi (1957) included a record of this species from Piscataquis County, Maine, but not specifically from Mount Katahdin. However, his plotted map symbol (Map 5, *op cit.*) for this species approximates the location of Mount Katahdin. Tangle webs of this theridiid spider are commonly found on branches of small trees and shrubs.

Results & Discussion

Faunal Composition

Based on published and unpublished records, the spider fauna of Mount Katahdin comprises 145 species of 16 families and 90 genera. This species count consists of three categories: 1) species represented solely by published records ($N = 22$); 2) species represented solely by new, unpublished records ($N = 98$); and 3) species represented by both published and unpublished records ($N = 25$). Despite some overlap among these categories, the second category clearly indicates a substantial increase in our knowledge of Mount Katahdin's spider fauna.

Prior to the 1986 expedition, the previously known fauna was 44 species based on published records. This number of species has since grown to 145, an increase of 229.5% due chiefly to our 1986 spider-collecting expedition, plus a few miscellaneous collections by students, Park personnel and others. Three species – *Maro nearcticus* Dondale & Buckle, 2001, *Meioneta amersaxatilis* (Saaristo & Koponen, 1998), and *Meioneta jacksoni* Braendegaard, 1937 – have appeared in the literature since; all three were taken during the 1986 expedition.

Among the currently known fauna, species richness per family ranges from 1 (Cybaeidae, Pisauridae) to 59 (Linyphiidae). The Linyphiidae are represented by 22 species of Linyphiinae, and 37 species of Erigoninae, thus ranking first in richness. The Lycosidae rank second in richness with 17 species, the Theridiidae third with 10 species.

A similar species-richness trend, with Linyphiidae first and Lycosidae second, is evident for other northern spider faunas (Pickavance and Dondale 2005), including mountainous regions (Paquin and LeSage 2000). Fully 40.7% of Mount Katahdin's spider fauna ($N = 145$ species) are linyphiids; only 11.7% are lycosids. Hence, the fauna is comprised chiefly of web-spinner species (64.8%), with fewer hunter species (35.2%) – a skewed guild representation in favor of web spinners due chiefly to linyphiid richness.

Early Collections

Prior to the 20th century, little if anything was known about Mount Katahdin's spider fauna. Records of spiders collected in Maine appear in the literature as early as 1847 (see Hentz 1875); however, their specific collection localities within the state are not given. Shortly after the turn of the century, Elizabeth B. Bryant in her seminal work on New England spiders included records of spiders from Mount Katahdin (Bryant 1908). Likewise, James H. Emerton published at least three papers that include the names of spiders collected on Mount Katahdin (Emerton 1911, 1913, 1914). For example, Emerton (1911) noted that the linyphiid *Agynera olivacea* (Emerton, 1882) was taken by "H. C. Britcher" on Mount Katahdin in 1901. However, this most likely was not the first species of spider taken on the mountain. In the late 1800's (possibly 1891), Emerton hired a guide to lead him to the summit of Mount Katahdin and collect spiders enroute; see Neff (2006) for a humorous account of this early spider-collecting expedition. In 1922, Ralph V. Chamberlin described and named a new species of gnaphosid based on a male collected on Mount Katahdin (Chamberlin 1922).

In 1923, Irving H. Blake, a graduate student at the University of Illinois, began ecological studies of the plants and animals on the upper slopes of "Mount Ktaadn" – an early name for Mount Katahdin. Blake included insects and spiders among the animals he collected and later sent to specialists for identification. James H. Emerton identified the spiders collected by Blake on Mount Katahdin (Blake 1927, 1931); however, many of the named species have since fallen into synonymy.

During the next 50+ years, records of spiders collected on Mount Katahdin continued to appear in the literature. Chronologically, these records were published by: Zorsch (1937), Bishop and Crosby (1938), Chamberlin and Ivie (1945), Edwards (1958), Dondale (1961), Exline and Levi (1962), Dondale et al. (1964), Gertsch (1964), Dondale and Redner (1968), Ivie (1969), Levi (1971), Leech (1972), Kaston (1973), Platnick and Shadab (1975), and Platnick and Shadab (1983). By the mid-1980's, the cumulative fauna for Mount Katahdin had reached 44 species of spiders, all based on published records. Then, the 1986 spider-collecting expedition, plus a few miscellaneous collections, yielded an additional 101 species – a substantial increase (229.5%) over the previously known fauna.

Historically, the Mount Katahdin fauna has yielded descriptions and type specimens of at least five new species of spiders: *Incestophantes duplicatus* (Emerton, 1913), holotype ♂; *Maro nearcticus* Dondale & Buckle, 2001, paratype ♂; *Meioneta amersaxatilis* (Saaristo & Koponen, 1998), paratype ♂, ♀; *Clubiona gertschi* Edwards, 1958, allotype ♀; and *Gnaphosa orites* Chamberlin, 1922, holotype ♂. Specimens of *Maro nearcticus*, *Meioneta amersaxatilis*, and *Gnaphosa orites* were taken during the 1986 expedition.

Estimated fauna

We suspect that the actual spider fauna associated with diverse habitats of Mount Katahdin may approach 300 species. For example, an additional 110 species possibly inhabit Mount Katahdin's spruce-fir communities, based on inventories of this forest type elsewhere in Maine (Jennings et al. 1988; Jennings and Dimond 1988; Jennings et al. 1990). If so, then the currently known fauna represents ca. 57% of the potential fauna.

Notably absent from the current checklist of Mount Katahdin spiders are species of Anyphaenidae, Corinnidae, Liocranidae, Mimetidae, Miturgidae, Oxyopidae, Theridiosomatidae, and Uloboridae. Likewise, additional species of families already represented are likely found on Mount Katahdin. Such examples include *Araneus groenlandica* (Strand, 1906) and *A. washingtoni* Levi, 1971 among the Araneidae; *Clubiona bryantae* Gertsch, 1941 and *C. opeongo* Edwards, 1958 among the Clubionidae; *Haplodrassus bicornis* (Emerton, 1909) and *Orodassus canadensis* Platnick & Shadab, 1975 among the Gnaphosidae; *Hahnina glacialis* Sørensen, 1898 among the Hahniidae; *Drapetisca alteranda* Chamberlin, 1909 and *Tenuiphantes zebra* (Emerton, 1882), plus numerous Erigoninae among the Linyphiidae; *Alopecosa pictilis* (Emerton, 1885) and *Pardosa furcifera* (Thorell, 1875) among the Lycosidae; *Philodromus mysticus* Dondale & Redner, 1975 and *P. oneida* Levi, 1951 among the Philodromidae; *Dolomedes striatus* Giebel, 1869 and *Pisaurina mira* (Walckenaer, 1837) among the Pisauridae; *Chalcoscirtus alpicola* (L. Koch, 1876) and *Eris militaris* (Hentz, 1845) among the Salticidae.

A potential fourth source of information about Mount Katahdin's spider fauna remains to be explored – i.e. unpublished data associated with specimens now residing in museums. Such institutions include: The American Museum of Natural History (AMNH) in New York, NY; the Museum of Comparative Zoology (MCZ) at Harvard University in Cambridge, MA; and the Canadian National Collection (CNC) in Ottawa, ON. The process of finding such records will require monumental efforts, unless species records have been catalogued electronically.

To achieve a more comprehensive estimate of Mount Katahdin's spider fauna will require employment of additional, more diversified sampling methods and techniques in a greater diversity of habitats, and over longer periods of time. Examples of such methods include: collection of litter samples from talus slopes, forests, meadows, and bogs, and subsequent extraction of spiders by Berlese funnels; installation of tree-trunk traps on conifers and hardwoods to capture bark-inhabiting spiders; deployment of flight-intercept traps (Malaise, Lindgren funnel) to capture cursorial and ballooning spiders; and collection of foliage samples from mid- and lower crowns of conifers and hardwoods.

Spiders associated with fragile subalpine-alpine plant communities near the summit of Mount Katahdin may be adversely impacted by off-trail hiking and climate change. Arctic, subarctic, and rarely collected species are of interest and of potential concern. Examples of arctic-subarctic species include seven species of linyphiids, four species of lycosids, and one gnaphosid species – all found in subarctic-alpine habitats near the summit of Mount Katahdin; see Checklist. Two examples of rarely collected species are: *Cybaeota calcarata* (Emerton, 1911) and *Dendryphantes nigromaculatus* (Keyserling, 1885). Neither species has been found elsewhere in the state since first recorded on Mount Katahdin in 1911 and 1973, respectively. All such special interest species, and possibly others yet to be discovered, warrant Park surveillance and protection as human visitation increases and climate changes. All collecting in Baxter State Park is subject to an advance permit process and approval from the Park Director.

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