

NEW DISTRIBUTION RECORDS FOR THE MOSQUITOES OF NEW ENGLAND¹

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The Public Health Service conducted many anopheline mosquito surveys in New England during the period 1942-45. These surveys were made in the vicinities of Army, Navy, and Veterans Administration establishments principally in Massachusetts, Rhode Island, and Connecticut. Relatively few collections were made in the northern New England states of Maine, New Hampshire, and Vermont. Principal emphasis was placed on anopheline mosquitoes during this work though other species encountered were also collected and identified. Collections made during these surveys as well as other miscellaneous collections made by the writers are summarized in this report. A few records from the Cornell University Collection and from the collections of Dr. Harry D. Pratt are also included.

Thirty-four species of mosquitoes were taken during the period reported. These species are given in alphabetical order in

the following list. Included also for each species are the localities where collected, types of collections, abundance, and the earliest and latest months of collection. Nine species known from New England, which were not taken by the writers, are also included in the list. These records are from Howard, Dyar and Knab (1917), Johnson (1925), Dyar (1928), Lowry (1929), Lathrop (1939), Tulloch (1939), Getting and Feemster (1940), King and Bradley (1941), Knutson (1943), Matheson (1945), and Scott (1948, 1949).

Symbols are used to designate the type of collections for each of the locality records given below as follows: (B)—biting; (L)—larval; (R)—reared from larvae or pupae; (S)—diurnal resting station; and (T)—light traps. Each species is rated as "rare," "common," or "abundant" for each locality. In general, a species is considered to be rare if no more than nine specimens were taken in any one collection, common if from 10 to 99 specimens were taken, and abundant if 100 or more were taken in a single collection. For some of the rarer species the exact numbers of specimens collected are stated as are the specific dates of collection.

Aedes atropalpus (Coquillett): Locally distributed throughout eastern United States (Matheson, 1944). It breeds in rock holes along streams and lakes and is

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known from all of the New England states. **Maine:** Orono (Cornell University Collection); **Rhode Island:** Jamestown (L), common, August, H. I. Scudder; Point Judith (L), abundant, August, H. I. Scudder; **Vermont:** Pittsford, August (Cornell University Collection).

Aedes aurifer (Coquillett): A common spring species in southern New England which often proves to be a troublesome pest in wooded areas. Scott (1949) also reports it as being quite numerous in Vermont. **Connecticut:** Avon 1 female, July 11, 1945; Old Mystic (L,R,S), rare, April-May; Round Hill (L,R), rare, May. **Massachusetts:** Ayer (T), rare, July; Framingham (T), rare, May-July (Two males determined by genitalia); Needham (L), rare, April; Taunton (B,S,T), common, May-June; Waltham (L,S,T), rare, April-June; West Roxbury (B), common July. **Rhode Island:** East Greenwich (B), common, July; Hope Valley (B), common, June; Wickford (B,L,R,S,T), common, April-July.

Aedes canadensis (Theobald): This common mosquito occurs throughout New England. It is usually the first species to occur in the spring and often proves to be a serious pest. It has been found from March through September. **Connecticut:** Avon (T), rare, June; Guilford (L,R), common, April-May; Norwalk (L,R), common, May-June; Old Mystic (L,R), common, April; Round Hill (L,R), abundant, May; Stafford (L,R), common, May. **Maine:** Portland (B), common, August, H. I. Scudder; Presque Isle (B), rare, August. **Massachusetts:** Ayer (B,L,S,T), common, May-August; Framingham (B,L,R,S,T), common, March-June; Northampton (B), rare, August; Taunton (S), rare, May; Waltham (L,R,S,T), rare, April-September. **Rhode Island:** Escoheag (B), rare, June; South Foster (L,R), abundant, April; Wickford (B,L,S,T), common, April-July. **Vermont:** Jacksonville (L), 3, August 20, 1943, H. D. Pratt.

Aedes cantator (Coquillett): Breeds in the brackish marshes along the Atlantic Coast from Connecticut to Maine. It is

an annoying pest in some localities. Not reported from **Vermont**. **Connecticut:** Avon (T), rare, June; **Maine:** Brunswick (B), rare, August; Kittery (B,L), common, August; Portland (B,L), abundant, August, H. I. Scudder. **Massachusetts:** Ayer (S,T), rare, June-August; Boston (S,T), rare, June-July; Framingham (S,T), rare, May-August; Taunton (S), rare, June-July; Waltham (S), rare, July. **New Hampshire:** Portsmouth (B,L), abundant, August, H. I. Scudder. **Rhode Island:** East Greenwich (B), rare, July; Wickford (B,L,R,S,T), common, April-October.

Aedes cinereus (Meigen): This small brown mosquito is widespread in New England. It is a fierce biter and an important pest in many areas. It occurs in all of the New England states but has been found in greatest numbers in **Massachusetts**. **Connecticut:** Columbia (L,R), rare, April; Round Hill (L,R), rare, May; Stafford (L,R), rare, May. **Maine:** Portland (B), common, August; Presque Isle (B), 2 females, August 6, 1942, H. I. Scudder. **Massachusetts:** Ayer (B,L,S,T), common, June-October; Boston (T), rare, June-July; Framingham (B,L,R,S,T), common, April-October; Hingham (B,S), rare, June; Needham (L,S), rare, April-May; Taunton (B,S,T), common, May-October; Waltham (L,R,S,T), rare, April-October; Worcester (B), common, August. **New Hampshire:** Portsmouth (L), August 11, 1942, H. I. Scudder. **Rhode Island:** Wickford (B,T), rare, May-July. **Vermont:** Brandon (B), 2 females, August 30, 1945; Jacksonville (L,R), 3, August 15-20, 1943, H. D. Pratt; Lake Dunmore (B), 7 females, August 29, 1945; Wallingford (B), 1 female, August 31, 1945.

Aedes communis (De Geer): *A. communis* was not taken in New England by the writers although it has been reported from **Maine**, **Massachusetts**, and **New Hampshire** (Johnson, 1925). Lowry (1929) states that it is the most common black-legged woods mosquito in **New Hampshire**.

Aedes diantaeus (Howard, Dyar, and Knab): This species is quite rare in New England. It has not been encountered by the writers though it has been recorded in **Maine** and **New Hampshire** by Howard, Dyar, and Knab (1917) and Johnson (1925).

Aedes dorsalis (Meigen): Listed from **Connecticut** and **Massachusetts** (Howard, Dyar, and Knab, 1917). It was not taken by the writers.

Aedes excrucians (Walker): Occurs throughout most of New England, being recorded from every state. It is difficult to distinguish from *A. fitchii* and *A. stimulans* and records based on females only should be regarded as tentative. **Connecticut**: Avon (T), rare, June; Round Hill (L,R), rare, May. **Maine**: Portland (B), common, August, H. I. Scudder. **Massachusetts**: Ayer (S,T), rare, May–August; Boston (T), rare, June–July; Framingham (B,L,R,S,T), rare, April–August (3 males determined by genitalia); Hingham (B,S), rare, June–July; Needham (L,S), rare, April–May; Taunton (B,S,T), common, May–August; Waltham (L,R,S,T), rare, April–June; West Roxbury (S), rare, July. **New Hampshire**: Suncook (S), rare, September. **Rhode Island**: Wickford (B,L,S,T), rare, May–July.

Aedes fitchii (Felt and Young): Similar in appearance and habits to *A. excrucians* and *A. stimulans*. It is known from all of the New England states. **Connecticut**: Avon (B,S,T), rare, May–July; Old Mystic (L,R), rare, May 15, 1945 (2 males determined by genitalia); Round Hill (L,R), rare, May 17, 1945 (2 males determined by genitalia). **Maine**: Portland (B), rare, August. **Massachusetts**: Ayer (S,T), rare, June–August; Boston (T), rare, June–July; Framingham (B,L,R,S,T), rare, April–July (2 males determined by genitalia); Hingham (B,S), rare, June–July; Needham (L), rare, April; Taunton (S), rare, May; Waltham (L,T), rare, April–June. **Rhode Island**: Wickford (B,L,R,S,T), common, May–June (4 males determined by genitalia).

Aedes grossbecki (Dyar and Knab): A

rare species in northeastern United States which has not been reported previously from New England. The writers have identified a single female which was reared from a larva collected on August 20, 1943, by H. D. Pratt from the marginal waters of Laurel Lake, near Jacksonville, **Vermont**.

Aedes impiger (Walker): This rare northern species was not taken by the writers. It is apparently recorded only for **New Hampshire**. (Johnson, 1925.)

Aedes implacabilis (Walker): An early spring species which is reported from all of the New England states except **Maine**. The females cannot be separated from those of *A. punctor* and positive determinations must be based on larvae or male genitalia. **Connecticut**: Columbia (L,R), 3 males reared from collection of April 12, 1945 (determined by genitalia); Guilford (S), 1 male, May 15, 1945 (determined by genitalia). **Massachusetts**: Framingham (T), 14 males, May–June (determined by genitalia); Taunton (T), 9 males, May–June (determined by genitalia). **Rhode Island**: South Foster (L,R), 7 males and 15 females reared from larvae collected April 12, 1945. Males verified by genitalia.

Aedes implacabilis (Walker) or *A. punctor* (Kirby): The following records refer to female specimens which belong to one of these two closely related species but could not be positively identified. **Connecticut**: Avon (S,T), 2 females, May 22, 1945, 1 female, July 6, 1945; Old Mystic (S), 1 female, May 15, 1945; Round Hill (B), 3 females, May 17, 1945; Stamford (B), 1 female, May 15, 1945. **Massachusetts**: Ayer (S), rare, May–June; Cochituate (L,R), 1 female, April 19, 1945; Framingham (B,S,T), rare, May–June; Hingham (B), common, June; Needham (S), common, May; Taunton (B,S,T), common, May–June; Waltham (S,T), 4 females, May 15–31, 1945. **Rhode Island**: Escoheag (B), common, June; Hope Valley (B), 1 female, June 30, 1944; Wickford (B,S,T), common, May.

Aedes intrudens (Dyar): Is known from all of the New England states except **Vermont** though the writers found it

only in **Massachusetts**. Knutson (1943) reports it as a common pest in **Rhode Island** during late May and June. **Massachusetts**: Framingham (S,T), 2 females, June 1-18, 1944; Hingham (B), 1 female, June 14, 1944; Needham 1 female, May 16, 1945; Taunton (S), 1 female, May 8, 1945; 2 females, June 2, 1944; Waltham (L,R), 1 male, April 25, 1945 (determined by genitalia).

Aedes punctor (Kirby): This species appears to be much less common than *A. implicabilis* which it resembles closely. We have a single definite record for the entire New England area, although it has been reported from **Maine** and **New Hampshire**. **Massachusetts**: Ayer (T), 1 male (determined by genitalia), July 25, 1944.

Aedes sollicitans (Walker): An important pest mosquito along the Atlantic Coast where it breeds in saline pools. It has been observed in great numbers from **Maine** to **Rhode Island**. It is also widely distributed along the coastal regions of **Connecticut** (Matheson, 1945). Not recorded for **Vermont**. **Maine**: Brunswick (B), common, August; Kittery (B, L), abundant, September; Portland (B, L), common, August, H. I. Scudder. **Massachusetts**: Ayer (T), rare, July; Boston (T), rare, June-July; Framingham (T), rare, July-September; Taunton (T), rare, August. **New Hampshire**: Portsmouth (B,L), abundant, August, H. I. Scudder. **Rhode Island**: Sakonnet Point (L), abundant, August, H. I. Scudder; Wickford (L), abundant, June-September.

Aedes sticticus (Meigen): Found in significant numbers only in **Vermont**. It is considered by Scott (1948) to be one of the five most important pest species in this state. **Connecticut**: Avon (T), rare, May-June. **Maine**: Portland, 1 female, August 3, 1942, H. I. Scudder; **Massachusetts**: Ayer (T), 3 females, July 17-August 4, 1944. **Vermont**: Brandon (B,S), 17 females, August 25-30, 1945; Lake Dunmore (B,S), common, August; Wallingford (B), 4 females, August 31, 1945.

Aedes stimulans (Walker): This mos-

quito is a fierce biter but was infrequently encountered. It is very difficult to distinguish from *A. excrucians* and *A. fitchii* except by the male genitalia or larva. It has been recorded from all New England states. **Connecticut**: Avon (S,T), rare, June-July; Round Hill (L,R), rare, May. **Massachusetts**: Ayer (S,T), rare, May-August; Boston (T), rare, June-July; Framingham (B,L,R,S,T), rare, March-July; Hingham (S), rare, June; Taunton (S,T), rare, June-August; Waltham (S), rare, July. **Rhode Island**: Wickford (B,T), rare, May-June.

Aedes taeniorhynchus (Wiedemann): This small salt marsh mosquito has been reported from many localities in **Connecticut** (Matheson, 1945) and **Massachusetts** (Getting and Feemster, 1940). According to Johnson (1925) it also occurs in **Rhode Island**.

Aedes trichurus (Dyar): Appears to be a rare species in New England, although recorded from all six states. A small number of specimens were collected in **Connecticut**, **Massachusetts** and **Vermont**. **Connecticut**: Avon (T), 1 female, May 19, 1945, determined by Dr. Robert Matheson. **Massachusetts**: Framingham (B,L,S,T), 4 females, May 17, 30, 1944; May 15, June 10, 1945; 1 larva, March 20, 1945; Taunton (S), 2 females, June 2, 1944; Waltham (L,R), 1 larva, April 19, 1945. **Vermont**: Manchester, June (Cornell University Collection).

Aedes triseriatus (Say): This small tree-hole-breeding species while, recorded from all 6 states, was found rather infrequently though it may be locally abundant at times. **Maine**: Portland, August, H. I. Scudder. **Massachusetts**: Ayer (B,T), rare, June-August; Boston (T), rare, June-July; Chicopee (B), rare, August; Framingham (B,S,T), common, June-September; Waltham (B,S), rare. **Vermont**: Jacksonsville (B), 1 female, August 20, 1943, H. D. Pratt; Wallingford (B), 1 female, August 31, 1945.

Aedes trivittatus (Coquillett): This species appears to be very rare in New England though it is known from all states except **New Hampshire** and **Vermont**.

Connecticut: Canaan (B), 3 females, August 30, 1945. **Maine:** Portland, 6 adults, August 3-5, 1942, H. I. Scudder.

Aedes vexans (Meigen): This is considered the most important pest mosquito in most inland areas of New England. It was found in great numbers in all states except **New Hampshire**, although Lowry (1929) reports it as "a common species" in this state. **Connecticut:** Avon (B,S,T), common, May-September; Canaan (B), rare, August; Guilford (L,R,S), abundant, August. **Maine:** Portland (B), abundant, August. **Massachusetts:** Ayer (L,S,T), abundant, May-October; Boston (T), abundant, June-July; Chicopee (B), abundant, July-August; Framingham (B,L,S,T), abundant, May-October; Hingham (B), common, June; Holliston (B), abundant, July; Northampton (L,S,T), abundant, August-September; Taunton (B,L,S,T), abundant, May-October; Waltham (B,L,S,T), abundant, June-October; West Roxbury (B,L,S), abundant, July-September. **Rhode Island:** Wickford (L,R,S,T), common, May-October. **Vermont:** Brandon (B,S), common, August; Lake Dunmore (B,S), common; Jacksonville (L,R), common, August 20, 1943, H. D. Pratt.

Anopheles crucians (Wiedemann): Occurs sparsely in the southern New England states. We have taken only twelve specimens from **Massachusetts** and **Rhode Island**. It is also known from **Connecticut** (Matheson, 1945). **Massachusetts:** Ayer (T), 1 female, September 2, 1944; Taunton (S,T), 4 females, July 2-August 30, 1945; Waltham (T), 1 female, August 15, 1944. **Rhode Island:** Wickford (T), 3 males, 3 females, August 27, 30, September 5, 11, 27, 1945.

Anopheles earlei (Vargas): This species has been previously referred to as *A. maculipennis* Meigen or *A. occidentalis* Dyar and Knab. It is widely distributed in New England but appears to be common only in the more northern areas, and has not been recorded from **Rhode Island**. **Maine:** Brunswick (L,S), common, August; Liberty (L), 1, August 17, 1944; Portland (L), 1, August 15, 1944. **Massa-**

achusetts: Ayer (S), 1 female, September 7, 1944. **New Hampshire:** West Peterboro (S), 2 females, November 8, 1945. **Vermont:** Danby (S), 1 female, August 31, 1945.

Anopheles punctipennis (Say): This is the most abundant anopheline in New England, having been collected in almost all areas studied. **Connecticut:** Avon (L,R,S,T), common, May-September; Canaan (B), rare, August. **Maine:** Brunswick (L), rare, August; Liberty (L,R), common, August; Portland (L,S), rare, August; Presque Isle (S), rare, August, H. I. Scudder. **Massachusetts:** Ayer (L,S,T), common, April-December; Boston (T), rare, June-July; Chicopee (B,L,S), common, August-September; Framingham (L,R,S,T), common, March-December; Hingham (L), rare, June; Northampton (L,S), rare, August-September; Springfield (L,R,S), rare, August; Stockbridge (L), rare, August; Taunton (L,R,S,T), common, February-December; Waltham (L,S,T), abundant, January-December; West Roxbury (S), common, July-September. **New Hampshire:** Bennington (S), 1 female, August 30, 1945, L. E. Perry; East Jaffrey (S), 1 female, August 30, 1945, L. E. Perry; Hillsboro (S), 1 female, August 30, 1945, L. E. Perry; Suncook (L,S), rare, September; West Peterboro (S), common, August-November. **Rhode Island:** Newport (L), rare, June; Portsmouth (L), rare, August, H. I. Scudder; Wickford (L,S), rare, May-October. **Vermont:** Bellows Falls (L,R), rare, August; Brandon (L,R), common, August; Burlington (S), rare, August; Castleton (Cornell University); Danby (S), common, August; Dummerston (L,R), rare, August; East Dorset (L,R,S), common, August; Jacksonville (L,R), common, August 20, 1943, H. D. Pratt; Lake Dunmore (B), rare, August; Putney (L), rare, August; Westminster (L,R), rare, August.

Anopheles quadrimaculatus (Say): This important vector of malaria in eastern and southern United States is abundant in many areas of New England. It has been found in very large numbers in **Rhode**

Island and Massachusetts and somewhat less commonly in **Connecticut, Maine, New Hampshire,** and **Vermont.** It has not been taken in mountainous areas nor in the northern regions of **Maine** and **New Hampshire.** It was found in several localities in the Lake Champlain Valley of **Vermont** as far north as Burlington (Barnes, 1946). **Connecticut:** Avon (L,S), common, July–September. **Maine:** Kittery (L,S), 1 female, 3 larvae, September 7, 1944. **Massachusetts:** Ayer (B,L,S,T), abundant, May–November; Boston (T), rare, June–July; Chicopee (B), rare, August; Framingham (B,L,S,T), abundant, May–November; Lowell, August (Cornell University); Northampton (L,S), common, August–September; Stockbridge (L,R), common, August; Taunton (B,L,S,T), abundant, May–November; Waltham (B, L,S,T), abundant, July–November; West Roxbury (L,S), rare, July–September. **New Hampshire:** Bennington (S), 1 female, August 30, 1945, L. E. Perry; Portsmouth (L), rare, August; Suncook (L), rare, September; Webster (S), 1 female, August 29, 1945. **Rhode Island:** Portsmouth (L), common, August, H. I. Scudder; Sakonnet Point (L), common, August, H. I. Scudder; Wakefield (S), rare, August, H. I. Scudder; Wickford (B, L,R,S,T), abundant, May–October. **Vermont:** Brandon (L), rare, August; Burlington (S), common, August; East Dorset (S), 3 males, 4 females, August 31, 1945; Hubbardton (L,R), common, August; Hyde Manor (L,R), common, August.

Anopheles walkeri (Theobald): Widely distributed in New England and is probably more abundant than present records indicate as it is seldom encountered in natural resting places where *A. quadrimaculatus* is so frequently found. Knutson (1943) has reported this species breeding abundantly in **Rhode Island** and Scott (1949) states that it was "readily found in all parts of **Vermont.**" **Maine:** Rangeley, August (Cornell University Collection). **Massachusetts:** Ayer (S,T), rare, June–October; Chicopee (B), rare, August; Framingham (B,L,S,T), rare,

May–November; Taunton (S,T), rare, May–September; Waltham (L,S,T), rare, June–September. **New Hampshire:** Center Harbor (Cornell University Collection). **Vermont:** Hubbardton (L), August 26, 1945.

Culex pipiens (Linnaeus): The northern house mosquito is one of the most important pest species of this area. It is particularly abundant in urban areas. **Connecticut:** Avon (T), common, May–September; Round Hill (L,R), rare, May. **Maine:** Portland (L,S), abundant, August. **Massachusetts:** Ayer (L,R,S, T), common, May–October; Boston (T), common, July–August; Chicopee (B,L,S), common, August, H. I. Scudder; Framingham (L,S,T), abundant, April–December; Lowell, August–September (Cornell University Collection); Taunton (L,S,T), common, May–September; Waltham (L, S,T), common, May–October; West Roxbury (L,S), July–August. **New Hampshire:** West Peterboro (S), 3 females, November 8, 1945. **Rhode Island:** Wickford (L,S,T), abundant, May–October.

Culex restuans (Theobald): This species is very similar to *C. pipiens* and is found commonly in most areas of New England, being reported from all states. **Connecticut:** Avon (L,S,T), rare, June–September; Round Hill (L,R), rare, May. **Maine:** Portland (L,S), rare, August. **Massachusetts:** Ayer (L,S,T), rare, May–October; Boston (T), rare, June–July; Framingham (L,S,T), common, May–October; Hingham (S), common, June; Taunton (L,T), rare, June–October; Waltham (L,S,T), rare, July–October; West Roxbury (S), rare, July. **New Hampshire:** Portsmouth (L), common, August. **Rhode Island:** Wickford (L, T), rare, June–October. **Vermont:** Jacksonville (L,R), common, August 15–20, 1943, H. D. Pratt.

Culex salinarius (Coquillett): A common species breeding in both fresh and saline waters. It is now known from all six New England states. **Connecticut:** Avon (S), rare, August. **Maine:** Portland (L,S), abundant, August. **Massa-**

Massachusetts: Ayer (L,S,T), common, June–October; Boston (S,T), common, June–August; Chicopee (B), common, August; Framingham (L,S,T), rare, June–October; Taunton (L,S,T), common, June–November; Waltham (L,S,T), common, July–October; West Roxbury (S), rare, July. **New Hampshire:** Portsmouth (L), 2, August 11, 1942, H. I. Scudder. **Rhode Island:** Wickford (L,S,T), abundant, May–October. **Vermont:** Westminster (L,R), 5, August 29, 1945.

Culex territans (Walker): This small brown mosquito is abundant throughout the New England area. It is more commonly referred to in the literature as *C. apicalis* Adams. **Connecticut:** Avon (L,R,S), common, July–September. **Maine:** Kittery (L), common, September; Portland (L,S), common, August. **Massachusetts:** Ayer (L,R,S,T), abundant, May–October; Boston (T), rare, July; Chicopee (L,S), common, August; Framingham (L,R,S), common, May–October; Hingham (L), rare, June; Northampton (S), common, August–September; Springfield (L,R), common, August; Stockbridge (L), rare, August; Taunton (L,S,T), common, May–November; Waltham (L,S,T), common, May–October; West Roxbury (S), rare, July. **New Hampshire:** Portsmouth (L), common, August; Suncook (L,S), rare, September; West Peterboro (S), common, November. **Rhode Island:** Hope Valley (L), rare, June; Newport (L), rare, June; Wickford (L,R,S,T), abundant, May–September. **Vermont:** Hubbardton (L,R), 3 larvae, August 26, 1945; Hyde Manor (L,R), 6 larvae, August 26, 1945; Jacksonville (L,R), common, August 20, 1943, H. D. Pratt; Westminster (L,R), 3 larvae collected August 29, 1945.

Culiseta impatiens (Walker): This rare northern species was taken only in **Massachusetts**. It has also been reported from **Maine** and **New Hampshire** (Howard, Dyar, and Knab, 1917). **Massachusetts:** Waltham, 4 females, August 8, 1945.

Culiseta inornata (Williston): This species was not taken in New England by the writers but has been recorded from

Massachusetts by Howard, Dyar, and Knab (1917). It was also taken in very small numbers in this state by Getting and Feemster (1940).

Culiseta melanura (Coquillett): This small species is fairly common in **Massachusetts** and somewhat less common in **Rhode Island** and **Maine**. According to Lowry (1929) it is rare and local in **New Hampshire**. **Maine:** Kittery (S), 1 male, September 7, 1944. **Massachusetts:** Ayer (S,T), rare, July–October; Boston (T), rare, June; Framingham (S,T), common, June–October; Springfield (S), rare, August; Taunton (S,T), common, May–September; Waltham (S,T), rare, June–October. **Rhode Island:** Wickford (L,S,T), rare, June–September.

Culiseta morsitans (Theobald): Has been found in small numbers in several localities in **Massachusetts**, **Connecticut** and **Rhode Island**. It was found to be common only in Ayer and Framingham, **Massachusetts**. **Connecticut:** Stafford (L,R), 3, May 11, 1945. **Massachusetts:** Ayer (S,T), common, June–August; Boston (T), rare, July; Chicopee (S), rare, August; Framingham (S,T), common, May–October; Needham (L), rare, May; Taunton (S,T), rare, May–September; Waltham (L,S,T), rare, April–October; West Roxbury (S), rare, July. **Rhode Island:** Wickford (L,T), rare, June–August.

Mansonia perturbans (Walker): This species is a severe biter and has been found to be an important pest in a few localities in **Massachusetts** and **Rhode Island**. Its abundance in northern New England is less well known, though Scott (1949) reports it as a pest in Burlington, Newport, and Windsor, **Vermont**. **Maine:** Portland, 1 adult, August 3, 1942, H. I. Scudder. **Massachusetts:** Ayer (S,T), common, June–September; Boston (T), rare, June–July; Framingham (B,S,T), abundant, June–September; Taunton (S,T), common, June–September; Waltham (S,T), rare, June–August. **New Hampshire:** West Peterboro (S), 1 female, November 8, 1945. **Rhode Island:** East Greenwich (B), common,

July; Wickford (B,S,T), common, June-August.

Orthopodomyia signifera (Coquillett): This tree-hole breeding mosquito was not taken by the writers but is known from **Connecticut** (Matheson, 1945), **Massachusetts** (Tulloch, 1939), and **Rhode Island** (Knutson, 1943).

Psorophora ciliata (Fabricius): This large mosquito is a fierce biter, but fortunately is quite rare in New England. It has also been recorded for **New Hampshire**. **Connecticut**: Avon (B,S), 1 female, July 11, 1945. **Massachusetts**: Chicopee (B), 1, August 7, 1942, H. I. Scudder. **Rhode Island**: Wickford (T), 1 female, August 21, 1945.

Psorophora confinnis (Lynch Arrabalzaga): This important southern species has been reported from **Massachusetts** (Tulloch, 1939). It is otherwise unknown in New England.

Psorophora ferox (Humboldt): The writers have taken a single specimen of this species in New England. It is also known from **Connecticut** (Matheson, 1945). **Massachusetts**: Framingham (B), 1 female, July 11, 1944.

Uranotaenia sapphirina (Osten Sacken): This small species is very abundant in many areas, and has been recorded from all states but **Maine**. Larvae have been encountered much more frequently than adults. **Massachusetts**: Ayer (L,T), abundant, July-August; Boston (T), rare, June-July; Framingham (L,T), common, July-October; Taunton (L,R,S,T), common, June-October; Waltham (L,T), common, July-September. **New Hampshire**: Portsmouth (L), common, August. **Rhode Island**: Wickford (L,R,T), abundant, June-September. **Vermont**: Hubbardton (L,R), 7, August 26, 1945; Hyde Manor (L,R), 4, August 26, 1945.

Wyeomyia smithii (Coquillett): No special search was made for this species which breeds in water found in the leaves of the

pitcher plant. It has been previously reported from all states except **Vermont** and it undoubtedly occurs in that state as the writers have found it commonly at nearby Plattsburg, **New York**.

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