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# The beetle fauna of the state of Rhode Island, USA (Coleoptera): 656 new state records

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## Abstract

A summary and discussion of new state records from a recently assembled checklist of Coleoptera species known from the state of Rhode Island (270,660 hectares), USA, is presented. The checklist includes 2,208 species, is available on the World Wide Web, and will be published as a book by the Rhode Island Natural History Survey in 2003. The current status of the taxonomic and faunistic knowledge of southern New England Coleoptera is discussed. Six hundred and fifty six apparent **new state species records** for Rhode Island are presented, which constitute 30% of the total state beetle fauna. Three hundred and ninety of these records were collected during 1890–1930, and 266 additional new state records were added by collections made during 1995–2000. Two hundred and forty four of these new state records are not listed from any New England state in Downie and Arnett's *Beetles of Northeastern North America* (1996). The following 13 **new state family records** are herein reported from Rhode Island: Clambidae, Dryopidae, Heteroceridae, Artematopodidae, Phengodidae, Derodontidae, Nosodendridae, Endecatomidae, Colydiidae, Synchroidae, Stenotrachelidae, Salpingidae, and Nemonychidae. The beetle fauna of Rhode Island is far less well known than would be generally expected, particularly in comparison to our knowledge of the subequally speciose flora, and the faunal composition may have changed markedly during the last century. No strong evidence is found for changes in the beetle fauna due to climate change. It is concluded that if our prior knowledge of the beetle fauna of Rhode Island is at all typical, then our inventory of North American biodiversity is far from complete.

**Key words:** Rhode Island, Beetle fauna, new state records, Coleoptera, macro-ecology, biodiversity, inventory, monitoring, faunal change, global warming

## INTRODUCTION

"*A prerequisite to making any decisions concerning the preservation of populations, species, or higher taxa is knowledge of their existence*." — George Barrowclough, Ornithology Curator of the AMNH

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Bioinventory and monitoring both create and allow comparisons with baseline information critical to any management, use, or investigation of the world's biodiversity (Stork *et al*. 1996). Inventories on a state-by-state basis are important because state governmental agencies are among those best capable of preserving their own biodiversity. However, a complete inventory of a speciose taxon such as the beetles, of even a small state, is an enormous, and perhaps daunting, task.

Based on described species alone, the order Coleoptera is the most species-rich lineage of life on earth. Although groups such as the nematodes and mites may contain more species, only small fractions of these have been described (Groombridge 1992). There has been an average of 2,300 new beetle species described annually during the years 1979 to 1988 (Groombridge 1992). The last attempt to list all described beetle species in a single published series ceased in 1940 and contained nearly 221,500 species (Evans & Bellamy 1996). Recent estimates of described beetle species have ranged from 290,000 (Arnett 1985) to 400,000 (Groombridge 1992); estimates of the primarily tropical, world beetle fauna, including undescribed species, range as high as 2.3–2.4 million species (Groombridge 1992). If such estimates are accurate, then during the 240 years since Linnaeus we have cataloged less than 20% of the world's beetle fauna. It is common knowledge that the great majority of undescribed and undocumented taxa occur in the tropics. However, as this study demonstrates, our knowledge of the beetle fauna of the temperate zone is far from complete.

The acquisition of such knowledge can be simplified into three levels of accomplishment: (1) original descriptions of all taxa within a region (which often over-estimates the actual number of species), (2) revisionary work providing keys to all species, and careful assessment of species validity, of a taxon, and (3) regional atlases providing fine scale distributional data for a taxon within a region. Most of the tropical fauna, with few exceptions, has yet to pass level one. Some temperate zone insect faunas have achieved level three, such as certain dragonfly (*e.g*., Carpenter 1991) or butterfly faunas (*e.g.*, O'Donnell *et al*. 1998). However, our knowledge of many faunas of the temperate zone remains in a mixture of level one and two. These faunas have had virtually all of their species described (in some cases multiple times!) but the majority of these taxa have yet to be revised, so few reliable keys exist, numerous invalid names await synonymy proposals, and significant distributional data are lacking for most species. For example, there are 62 beetle species, all described from Rhode Island by Thomas Casey Jr. around the turn of the 19$^{th}$ century, that have been reported from no other state (Sikes, in press). The majority of these names will probably become junior synonyms. Thus, a taxonomic priority in southern New England, and probably most of the temperate zone, is not the description of new species, as it is in the tropics, but the removal of invalid names from our catalogs. In the higher latitudes, such as the Arctic Circle, or regions such as the UK, that have a better ratio of naturalists to species, most taxa have been worked beyond level three. The beetle fauna of southern New England, as a whole, remains between levels one and two.

  

The purpose of this report is to validate new records found during the assembly of a checklist of Rhode Island Coleoptera for the Rhode Island Natural History Survey (Sikes, in press), and to assess our knowledge of the beetle fauna of a state that, by reasonable projections, should have a well documented biota. This report also emphasizes how far from complete our inventory of North American biodiversity is, with the hope that both professional and amateur naturalists will be inspired to continue to comb the woods, fields, marshes, and beaches until we have a reasonably complete catalog of the species that live in our backyards.

## METHODS

*Study Area*

Rhode Island, the smallest state of the United States, encompasses 1,045 square miles (270,660 ha) in coastal northeastern North America. It is densely populated with almost a million residents. The dominant vegetation, typical of southern New England, currently consists of Oak-hickory (*Quercus* spp. - *Carya* spp.) forests. This region has no mountainous areas (highest point: 812 ft. [244 m] ), receives ca. 100–117 cm of precipitation annually (Jorgensen 1978) and has a number of maritime communities, including a diversity of hydric (*e.g.*, tidal marshes, bogs, etc.) and xeric (*e.g.*, sand-plain) communities. These communities have assembled during the last 10,000–15,000 years since the most recent glaciation of the area (Jorgensen 1978). Prior to 1920, 96% of the virgin forest of the northeastern states was eliminated (Reynolds and Pierson 1923). The region has since reforested and is currently over 70% forest (Jorgensen 1978).

*Sources of Data*

The current list of 2,208 species (Sikes, in press) should be considered an update to the only other cheklist of beetles for this state, prepared by Davis (1904) and an augmentation of Downie & Arnett's (1996) work. These two sources contributed the bulk of the published records to the complete checklist. Numerous, smaller taxonomic works including Rhode Island records were also used. In total, the checklist was assembled from records derived from 14 collections, 4 unpublished databases, and 66 publications (see Appendix). No attempt to exhaustively search the literature for records was undertaken and, as a result, some records may have been overlooked. The complete checklist is available as a searchable WWW database (Sikes 1999a) and is expected to be published by the Rhode Island Natural History Survey in 2003 (Sikes, in press). However, changes will be made to the on-line database as new data are obtained.

My own collection includes 835 identified species that were collected in Rhode Island during 1995–2000 by myself and others. Collecting methods included hand collecting with beating sheets and nets, black-lighting, trapping with pitfall traps, flight intercept traps, aquatic bottle-traps, etc. Although specimens were taken opportunistically throughout

  

Rhode Island, many records were taken from the following three regions: western-central and southern Rhode Island (West Greenwich, Arcadia, Great Swamp), Cranston, and Block Island. These three regions contrast strongly in their expected faunas. Western central and southern Rhode Island is primarily contiguous forest, Cranston is suburban / urban with little remaining forest or agricultural land, and Block Island is primarily open grass/ shrub habitat with regions of short, coastal forest. Many of the collected specimens were sent to specialists for identification, but some were identified by myself.

The majority of the records taken from specimens collected during 1890–1930 were derived from three collections: (1) Division of Entomology, Peabody Museum of Natural History, Yale University, (2) Roger William's Park Museum of Natural History, and (3) the University of Rhode Island Entomology Collection. Seven records were based on specimens in the Museum of Comparative Zoology, Harvard University as reported in an unpublished checklist of aquatic Coleoptera of New England (B. Colburn *in litt*.). Three records were based on specimens in the Field Museum, the Entomology Collection of the University of Michigan, and the American Museum of Natural History. These seven historic collections combined included 1,366 RI species, of which, 390, or 29%, are new state records. Additional information on historical collections of Rhode Island Coleoptera and the vouchers sources used for this checklist can be found in Sikes (1999b; in press).

Downie and Arnett's (1996) *Beetles of Northeastern North America* included 1,194 expected or documented Rhode Island records. Of these 1,194 species, only 535 were documented from RI (or 20% of the expected total 2,673 species). Downie and Arnett's (1996) work was not a revision of the northeastern North American beetle fauna but a synthesis of current (through 1992), published, knowledge. Thus, the large gaps in distributional information (particularly of the New England states) reflect the status of published knowledge and do not necessarily represent any lack of effort on Downie and Arnett's part. Myriad unpublished state records reside in numerous collections.

Additional sources of information included previously unpublished database records based on material examined by specialists of various groups who graciously made their data available. Various taxonomic revisions were examined for records, many of which were redundant with the data in Downie and Arnett (1996).

*Classification and Presentation*

The classification and sort order used for Table 1 follows that in the two volume series "American Beetles" (Arnett & Thomas 2000; Arnett *et al*. 2002) with species sorted alphabetically within genus.

Table 1 provides, in addition to the names of the species, a number of additional metadata that act as supporting evidence. Primary among these is the name of the taxonomist who identified the species, listed under 'Determiner.' Although the majority of these 656 species were identified by specialists there are 228 species in Table 1 whose specimens did not bear determination labels. These species were probably identified by either the collec-

  

tor or the curators of the collections in which they reside. I was able to, however, verify the identifications of numerous, more doubtful records. For each species, a list of all the voucher sources that place that species either in or near Rhode Island is provided. A voucher source code that has the suffix 'e' (for 'expected') indicates that voucher source does not document that species from Rhode Island but does document that species from land and habitats adjacent to Rhode Island (*e.g.* from Connecticut).

A typical entry might be: *Hydroporus signatus* Mann., determiner unknown, vouchers: p82e, c23. This indicates that although we do not know who identified this species, based on the Rhode Island specimens in Harvard University's Museum of Comparative Zoology [=c23], we can see that this species is known from southern New England as documented in Larson *et al.* (2000) [=p82e].

Table 1 also provides the page on which each species is listed in Downie and Arnett (1996) including the complete list of states and provinces from which each species is known in northeastern North America, which in this case is: MA, IN NF, ON, and PA. For some species, the name listed in Downie and Arnett (1996) is a junior synonym of the name listed in Table 1. These synonyms are not listed here but will be printed in the complete checklist (Sikes, in press). Finally, Table 1 provides the distribution of the species in the 8 regions of the New World (Fig. 1), north of South America used in Downie and Arnett (1996).

These 8 regions are as follows: 1) northeastern North America, 2) southeastern North America, 3) southwestern North America, 4) northwestern North America, 5) mid-northern central North America, 6) Mexico, 7) Central America south of Mexico, 8) the West Indies. These metadata confirm, for all species listed, that the species does occur in northeastern North America, and in some cases also New England, and consequently that its presence in Rhode Island is not unusual. Some of the species in Table 1 are not listed in Downie and Arnett (1996). For these species the page number is indicated as 'na' for 'not applicable,' and the distribution fields are left blank.

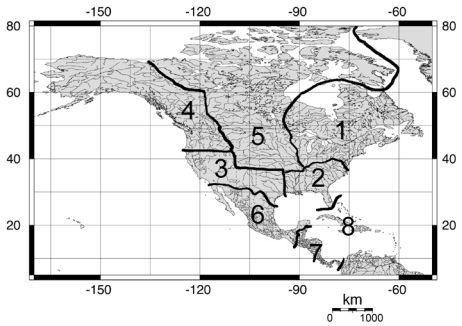


**FIGURE 1.** Map of North and Central America with regions used by Downie and Arnett (1996) indicated as referred to and described in the text and Table 1.

  

## RESULTS

The results are shown in Table 1.

**TABLE 1.** 656 newly reported beetle species for the state of Rhode Island. 244 of these species (marked with an asterisk '*') are not recorded from any New England state in Downie and Arnett (1996). 'Determiner' lists the taxonomist who identified the species and the voucher code of the collection(s) in which the identified specimen(s) reside. Listed under 'Vouchers' are the codes of the collections and publications that document the species from or near Rhode Island. See Appendix for complete list of voucher sources. Values under 'Page' are the page number on which the species is listed in Downie and Arnett (1996). Distribution in northeastern (N.E.) NA is taken from Downie and Arnett (1996) with 'RI' added. Values listed under 'Continental' indicate the distribution of the species in the 8 regions of the New World, north of South America used in Downie and Arnett (1996) (Fig. 1). The classification and the sort order for taxa follows Arnett and Thomas (2000) and Arnett *et al*. (2002). In brackets following each family name are the counts of species recorded from RI and the number of new state records respectively.

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| **Gyrinidae [ 17 / 7 ]** | | | | | |
| *Dineutus hornii* Roberts * | D. S. Sikes 2001 [c20, c15] | c15, c20, c37, c61 | 270 | RI IN MD NJ NY | 1, 3 |
| *Gyrinus aquiris* LeConte | D. S. Sikes 2000 [c37; c15] | c15, c37, p75e | 273 | RI MA NY WI | 1 |
| *G. dichrous* LeConte | unknown | c37, p75e | 272 | RI MA IN ME NY ON | 1 |
| *G. gibber* LeConte | D. S. Sikes 2000 [c15] | c15, p75e | 274 | RI MA ME PA | 1, 2 |
| *G. lecontei* Fall | K. B. Miller 2000 [c15] | c15, p75e | 273 | RI MA IL ME MI ON | 1 |
| *G. pectoralis* LeConte * | unknown | c20, p75e | 273 | RI ON PQ | 1, 4, 5 |
| *G. sayi* Aubé | D. S. Sikes 2000 [c37; c15] | c15, c37, p75e | 274 | RI CT MA IN ME NJ NY ON PA PQ | 1 |
| **Haliplidae [ 11 / 5 ]** | | | | | |
| *Haliplus leopardus* Roberts | D. S. Sikes 2000 [c15] | c15, p79e | 222 | RI CT MA IL IN NY ON PA WI | 1, 2, 4 |
| *H. pantherinus* Aubé * | D. S. Sikes 2000 [c15] | c15 | 222 | RI IL IN MI NY PQ WI | 1, 2, 5 |
| *H. triopsis* Say | unknown | c13, c61, c23 | 222 | RI MA IL IN ME MI NY OH ON PA PQ WI | 1, 2, 3, 5 |
| *Peltodytes muticus* (LeConte) | R.E. Roughley 1999 [c15] | c15, u28e, p79e, c37, c61, c23 | 224 | RI CT MA DE IN MI NS NY ON | 1, 2, 5 |
| *P. shermani* Roberts | D. S. Sikes 2000 [c15] | c15, p79e, c23 | 224 | RI CT MA DC NJ | 1, 2 |
| **Dytiscidae [ 65 / 17 ]** | | | | | |
| *Celina angustata* Aubé | R.E. Roughley 1999 [c15] | c15 | 229 | RI MA DE MD NJ | 1, 2, 3, 6, 7, 8 |
| *C. hubbelli* Young * | K. B. Miller 2000 [c15] | c15, p82e | 229 | RI IL IN MD MI NY OH ON PA | 1, 2, 3, 5 |
| *Liodessus fuscatus* (Crotch) | unknown | p79e, c23, p82e | 231 | RI CT MA DE IL IN MD MI NJ NY OH PA | 1, 2, 3 |
| *Heterosternuta pulcher* (LeConte) | unknown | c13, p82e | 239 | RI IL IN NH NY OH ON PA | 1, 2, 5 |
| *Hydroporus signatus* Mannerheim | unknown | p82e, c23 | 245 | RI MA IN NF ON PA | 1, 2, 4, 5 |
| *H. striola* Gyllenhal | J. Balfour-Brown [c13] | c13, p82e | 246 | RI MA MI NF ON PA PQ | 1, 4, 5 |
| *Hygrotus nubilus* (LeConte) | K. B. Miller 2000 [c15] | c15, p82e | 235 | RI MA IL IN MD MI NH NJ NY OH ON PA PQ VT WI | 1, 2, 3, 5 |
| *H. turbidus* (LeConte) | unknown | c23, p82e | 233 | RI MA IL IN MI NH NY PQ VT WI | 1, 3, 4, 5 |

*.....continued on the next page*

  

**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| *Nebrioporus rotundatus* (LeConte) | unknown | p79e, c13, p82e | 247 | RI CT MI NF NY ON PQ | 1, 3, 4, 5 |
| *Neoporus mellitus* (LeConte) * | K. B. Miller 2000 [c15] | c15, p82e | 238 | RI IN MI NY OH PA | 1, 2 |
| *Agabus aeruginosus* Aubé | unknown | c23, p82e | 252 | RI MA IL MI | 1, 2 |
| *A. ambiguus* (Say) * | unknown | c23, p82e | 252 | RI NF PA | 1, 2, 4, 5 |
| *A. bifarius* (Kirby) | K. B. Miller 2000 [c15] | c15, p82e | 251 | RI MA IL NF PQ | 1, 4, 5 |
| *A. gagates* Aubé | unknown | u28e, c23, p82e | 254 | RI IN MI ON PA | 1, 2 |
| *Ilybius pleuriticus* LeConte | R. E. Roughley 1999 [c15] | c15, p79e, p82e | 256 | RI CT MA IL LB ME NB NF NH NS NY ON PA PQ VT WI | 1, 4, 5 |
| *Coptotomus longulus* LeConte | K. B. Miller 2000 [c15] | c15, p82e | 259 | RI MA IL IN MD ME MI NY OH ON PA | 1, 4, 5 |
| *Cybister fimbriolatus* (Say) * | D. S. Sikes 2001 [c15] | c15, p82e | 265 | RI IN ON PQ | 1, 2, 3, 5, 6, 8 |
| **Carabidae [ 306 / 49 ]** | | | | | |
| *Notiophilus biguttatus* (Fabricius) * | W.L. Krinsky 2001 [c15] | c15 | 94 | RI NF NS | 1, 4 |
| *Carabus sylvosus* Say * | unknown | c37, p46e | 96 | RI NY ON PA | 1, 2, 3, 5 |
| *Elaphrus cicatricosus* LeConte | C. H. Lindroth 1975 [c26] | p2e, c15, p46e, c26 | 103 | RI CT MA IN ME NY PQ | 1 |
| *Dyschiriodes curvispinus* Putzeys | W.L. Krinsky 1999 [c15] | c15, p79e, c20 | 109 | RI CT ME | 1, 2, 3 |
| *D. filiformis* LeConte* | W.L. Krinsky 1999 [c15] | c15 | 108 | RI DE NY | 1, 2 |
| *Asaphidion curtum* (Heyden) | W.L. Krinsky 2001 [c15] | c15, p79e, p46e | 127 | RI CT MA ME NH NY | 1 |
| *Bembidion confusum* Hayward * | W.L. Krinsky 1999 [c15] | c15 | 130 | RI DE IN MI OH ON PQ | 1, 2, 5 |
| *B. fortestriatum* (Motschulsky) | W.L. Krinsky 1987 [c13] | c13, p46e | 141 | RI CT MA MI NF NS ON PQ | 1, 4, 5 |
| *B. obscurellum* (Motschulsky) | unknown | c20 | 135 | RI IN NB NF ON PQ VT | 1, 4, 5 |
| *B. petrosum* Gebler * | W.L. Krinsky 1987 [c13] | c13 | 135 | RI LB NF NS ON PQ | 1, 3, 4, 5 |
| *Paratachys oblitus* (Casey) * | W.L. Krinsky 2001 [c15] | c15, c13, p46e | 126 | RI CT IN NJ NY ON | 1, 2, 5 |
| *P. scitulus* (LeConte) * | W.L. Krinsky 2001 [c15] | c15 | 126 | RI DE NB ON PA | 1, 2, 3, 5 |
| *Porotachys bisulcatus* (Nicolai) * | W.L. Krinsky 1987 [c13] | c13, p46e | 127 | RI CT MA NB NY ON PA PQ | 1 |
| *Tachyta angulata* Casey | W.L. Krinsky 1999 [c15] | c15, p30, p79e, p46e | 122 | RI CT MA DC MD ME MI NB NH NJ NS NY ON PA PQ VT WI | 1, 2, 3, 4, 5 |
| *Poecilus chalcites* (Say) * | unknown | c37, p46e | 146 | RI CT DC DE IN ON PQ | 1, 2, 5 |
| *Pterostichus. ebeninus* (Dejean) * | W.L. Krinsky 1987 [c13] | c13, c20 | 149 | RI IN ON PQ | 1, 2, 3 |
| *P. melanarius* Illiger* | W.L. Krinsky 1998 [c15] | c15, p46e | 148 | RI CT IN NB NF NS NY ON PQ | 1, 4, 5 |
| *P. rostratus* Newman* | W.L. Krinsky 1998 [c15] | c15, p46e | 146 | RI CT IN NB NY ON PQ | 1, 2 |
| *P. tristis* (Dejean) | W.L. Krinsky 2001 [c15] | p2e, c15, c13, c20, p46e | 146 | RI CT MA IN ME NH NJ NY PQ WI | 1, 2 |
| *Amara littoralis* Mannerheim* | W.L. Krinsky 1998 [c15] | c15, p46e | 161 | RI CT MI NF NS NY ON PA PQ WI | 1, 2, 3, 4, 5 |
| *A. pennsylvanica* Hayward | W.L. Krinsky 1987 [c13] | c13, p46e | 159 | RI CT IL NH NS ON PA PQ | 1, 2, 3, 5 |
| *A. rubrica* Haldeman* | W.L. Krinsky 1987 [c13] | c13, p46e | 160 | RI CT DE IN NJ NY ON PQ | 1, 2, 5 |
| *Acupalpus rectangulus* Chaudoir | W.L. Krinsky 2001 [c15] | c15 | 179 | RI MA DE IN ON PQ | 1, 2 |
| *Harpalus puncticeps* Stephens | W.L. Krinsky 1998 [c15] | c15, p46e | 188 | RI CT MA NS NY ON PA PQ VT | 1 |
| *H. rufipes* (DeGeer) | W.L. Krinsky 2001 [c15] | p2e, c15, p46e | 188 | RI CT MA NB NF NS PE PQ | 1 |
| *H. spadiceus* (Dejean) | W.L. Krinsky 1987 [c13] | c13, p46e | 189 | RI CT DE NH PA | 1, 2 |
| *Notiobia nitidipennis* (LeConte) | W.L. Krinsky 1996 [c15] | p2e, c15, p46e | 180 | RI CT MA DC IL IN ME MI NJ NY OH ON PA PQ VT | 1, 2, 3 |
| *N. sayi* (Blatchley) * | W.L. Krinsky 1987 [c13] | c13, p46e | 180 | RI DC IL IN MD MI NJ NY ON PQ | 1, 2, 3, 5 |

*.....continued on the next page*

  

**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| *Stenolophus lecontei* Chaudoir | W.L. Krinsky 2001 [c15] | p2e, c15, p46e | 178 | RI CT MA DE IN ON PQ WI | 1, 2, 3, 5 |
| *S. megacephalus* Lindroth | W.L. Krinsky 1998 [c15] | c15, p46e | 178 | RI CT MA ON PA | 1 |
| *S. rotundicollis* (Haldeman) | W.L. Krinsky 1996 [c15] | p2e, c15, p46e | 178 | RI CT MA IN ON PA PQ | 1, 2 |
| *Trichotichnus vulpeculus* (Say) * | W.L. Krinsky 1987 [c13] | c13, p46e | 191 | RI CT DC IN ON PA PQ WI | 1, 5 |
| *Badister neopulchellus* Lindroth | W.L. Krinsky 1987 [c13] | p79e, c13, p46e | 172 | RI CT MA NJ NS NY ON PQ | 1, 2, 4, 5 |
| *B. ocularis* Casey | W.L. Krinsky 2001 [c15] | p2e, c15, p79e, p46e | 172 | RI CT MA IL IN NS NY ON PA PQ | 1, 2 |
| *Dicaelus politus* Dejean | W.L. Krinsky 1996 [c15] | p2e, c15, p79e, p46e | 170 | RI CT MA DC DE IL IN MD MI NH NJ NY OH ON PA PQ WI | 1, 2, 5 |
| *Lachnocrepis parallela* (Say) * | W.L. Krinsky 1987 [c13] | c13 | 168 | RI IN ON PQ | 1, 2, 3, 5 |
| *Oodes brevis* Lindroth* | W.L. Krinsky 1987 [c13] | c13, p46e | 167 | RI CT ON | 1, 2, 3, 5 |
| *Agonum affine* Kirby* | W.L. Krinsky 1987 [c13] | c13, p46e | 202 | RI CT MI NF | 1, 4 |
| *A. collare* (Say) * | W.L. Krinsky 2001 [c15] | c15 | 201 | RI IN PA | 1, 2 |
| *A. moerens* Dejean * | W.L. Krinsky 2001 [c15] | c15, p46e | 202 | RI IN ON PQ | 1, 2, 5 |
| *A. trigeminum* Lindroth | W.L. Krinsky 1998 [c15] | c15, p46e | 202 | RI CT MA NH NS | 1, 5 |
| *Cymindis americana* Dejean | W.L. Krinsky 1987 [c13] | c13, p46e | 210 | RI CT MA IN MI NY ON PA PQ | 1, 2, 5 |
| *C. elegans* LeConte | W.L. Krinsky 2001 [c15] | c15 | 210 | RI MA DC NJ NY | 1, 2 |
| *Lebia analis* Dejean | W.L. Krinsky 2001 [c15] | c15, c13, p46e | 214 | RI CT MA DC DE IL IN MD MI NJ NY ON PA VT | 1, 2, 3, 5 |
| *Philorhizus atriceps* (LeConte) | W.L. Krinsky 1987 [c13] | p79e, c13 | 216 | RI CT MA NJ NY | 1, 2 |
| *Brachinus alternans* Dejean | unknown | p79e, c20, p46e | 114 | RI CT DC IL IN MD MI NJ NY OH PA | 1, 2, 3, 5 |
| *B. medius* Harris | W.L. Krinsky 1987 [c13] | p79e, c13, p46e | 115 | RI CT MA IL IN MI NB NH NJ NY OH ON PA PQ VT WI | 1, 2, 3, 4, 5, 6 |
| *B. patruelis* LeConte | W.L. Krinsky 2001 [c15] | c15, p79e | 115 | RI CT MA IL MI NJ NY | 1 |
| *B. quadripennis* Dejean | W.L. Krinsky 1987 [c13] | c13 | 114 | RI MA IL IN MI NJ NY ON WI | 1, 2, 3, 4, 5 |
| **Hydrophilidae [ 52 / 13 ]** | | | | | |
| *Hydrochus excavatus* LeConte | unknown | p79e, c13 | 282 | RI CT IN | 1 |
| *H. scabratus* Mulsant | D. S. Sikes 1998 [c15] | c15 | 282 | RI IL IN MI NY OH PQ VT | 1, 4, 5 |
| *H. subcupreus* Randall * | D. S. Sikes 2000 [c15] | c15, c13 | 283 | RI IN NJ NY PQ WI | 1 |
| *Paracymus subcupreus* (Say) | G. E. Pickford [c13] | c13 | 293 | RI IL IN ME NF NH NY OH PA VT | 1, 2, 4, 5 |
| *Enochrus pygmaeus* (Fabricius) * | unknown | c13 | 295 | RI IL IN NY OH ON PA PQ | 1, 2, 3, 5 |
| *Hydrobius fuscipes* (Linnaeus) | D. S. Sikes 1998 [c15] | c15, p79e, c13, c20 | 291 | RI CT MA IL IN LB ME MI NH NJ NY ON PQ VT WI | 1, 2, 3, 4, 5 |
| *H. melaenus* (Germar) | D. S. Sikes 1998 [c15] | c15, p79e | 292 | RI CT MA IN MD ME MI NB NH NJ NS NY ON PA PQ VT WI | 1, 2 |
| *Laccobius minutoides* d'Orchymont * | unknown | c23 | 291 | RI NB ON PQ | 1, 2, 3 |
| *Tropisternus glaber* (Herbst) * | unknown | c13, c20, c61 | 284 | RI NS NY ON PQ | 1, 2, 5 |
| *Cercyon connivens* Fall | A. Smetana 1971 [c13] | c13 | 304 | RI MA DC IL IN MD MI NH NJ NY ON PA | 1, 2, 3, 5 |
| *C. convexiusculus* (Stephens) * | unknown | c13 | na | | |
| *C. herceus* Smetana * | unknown | c20 | 304 | RI MD OH ON PQ | 1, 2, 3, 4, 5 |
| *C. roseni* Knisch | unknown | c13 | 301 | RI MA IL IN ME MI NB NH NJ NY OH ON PA PQ WI | 1, 3, 4, 5 |
| **Histeridae [ 38 / 17 ]** | | | | | |
| *Aeletes politus* (LeConte) | unknown | c13, c37 | 606 | RI MA IN NY PQ | 1, 2 |

*.....continued on the next page*

  

**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| *Geomysaprinus obsidianus* (Casey) | P. Kovarik 1997 [c15] | c15 | na | | |
| *Hypocaccus mancus* Say * | unknown | c20 | 611 | RI IN MI NY ON PQ | 1, 5 |
| *H. patruelis* (J.E.LeConte) * | unknown | c13, c20 | 612 | RI IN MI NY ON PQ | 1, 2, 5 |
| *Dendrophilus punctatus* (Herbst) * | unknown | c13 | 613 | RI N NY | 1, 4 |
| *Platylomalus aequalis* (Say) * | P. Kovarik 1997 [c15] | c15 | 615 | RI IL IN MD MI NJ NY ON PA PQ | 1, 2, 4, 5 |
| *Onthophilus pluricostatus* (LeConte) | D. S. Sikes 1998 [c15] | c15 | 616 | RI MA MD MI NJ NY | 1, 2 |
| *Phelister vernus* (Say) * | P. Kovarik 1999 [c15] | c15 | 627 | RI IL IN MD NY PA | 1, 2, 3, 5 |
| *Platysoma coarctatum* (J.E.LeConte) | unknown | c13, c20, c37 | 626 | RI MA NY ON PQ | 1, 2, 5 |
| *Hololepta lucida* LeConte * | unknown | c13, c37 | 626 | RI IL IN MD NY ON PA PQ | 1, 2 |
| *Atholus sedecimstriatus* (Say) | D. S. Sikes 2000 [c15] | c15, c13 | 624 | RI MA NY ON PQ | 1, 5 |
| *Hister civilis* J. E. LeConte | P. Kovarik 1997 [c15] | c15 | 621 | RI MA IL IN NY PQ | 1 |
| *H. incertus* Marseul* | P. Kovarik 1999 [c15] | c15 | 621 | RI IN NY PA WI | 1, 2, 3, 5 |
| *Margarinotus cognatus* (LeConte) | unknown | c20 | na | | |
| *M. marginicollis* (J. E. LeConte) * | D. S. Sikes 2000 [c15] | c15, c13 | 619 | RI IL IN NY ON PQ | 1, 5 |
| *M. stygicus* (LeConte) | R. Wenzel 1997 [c15] | c15 | 619 | RI MA IN NY | 1, 5 |
| *Psiloscelis planipes* (LeConte) | unknown | c13 | 623 | RI MA NY PA | 1, 2 |
| **Ptiliidae [ 7 / 1]** | | | | | |
| *Acrotrichis haldemani* (LeConte) * | unknown | c20, c37 | 320 | RI IN NY | 1 |
| **Leiodidae [ 12 / 10 ]** | | | | | |
| *Leiodes punctatostriata* (Kirby) | unknown | c13 | 330 | RI IL NH | 1, 4 |
| *Aglyptinus laevis* (LeConte) * | unknown | c13 | 334 | RI NY ON PQ | 1, 2 |
| *Agathidium exiguum* Melsheimer * | unknown | c13 | 333 | RI ON | 1, 2, 5 |
| *Anisotoma basalis* (LeConte) * | Z. Svec 1998 [c15] | c15 | 335 | RI IN MI NY OH ON PA PQ | 1, 2 |
| *A. geminata* (Horn) | Z. Svec 1998 [c15] | c15 | 335 | RI IL IN ME NY ON PQ | 1, 2 |
| *Catops basilaris* Say | D. S. Sikes 2000 [c15] | c15 | 361 | RI IN ME NY PQ | 1, 2, 3, 4, 5 |
| *C. simplex* Say* | J. Ruzicka 1998 [c15] | c15, c37 | 361 | RI IN MD NY PQ | 1, 2, 3, 4 |
| *Prionochaeta opaca* (Say) | J. Ruzicka 1998 [c15] | c15 | 361 | RI MA IN NH NS NY ON PQ | 1, 2, 5 |
| *Sciodrepoides fumatus* (Spence) | J. Ruzicka 1998 [c15] | c15 | 361 | RI MA IL IN NB NY | 1, 4 |
| *S. watsoni* (Spence) | J. Ruzicka 1998 [c15] | c15 | 360 | RI IN ME NY OH PQ | 1, 2, 3 |
| **Scydmaenidae [ 15 / 2 ]** | | | | | |
| *Euconnus oreophilus* (Casey) | S. O'Keefe 1998 [c15] | c15, p79e | 344 | RI CT PA | 1 |
| *Parascydmus exiguus* (Casey) * | S. O'Keefe 1998 [c15] | c15 | 349 | RI PA | 1 |
| **Silphidae [ 12 / 1 ]** | | | | | |
| *Nicrophorus vespilloides* Herbst | D. S. Sikes 1998 [c15] | c15 | 357 | RI MA MI NB NF NH NS NY PA | 1, 4, 5 |
| **Staphylinidae [ 290 / 61 ]** | | | | | |
| *Omalium rivulare* (Paykull) | M. K. Thayer 1996 [c15] | c15 | 437 | RI MA IN NJ NY PQ | 1, 4 |
| *Eusphalerum convexum* Fauvel | unknown | c13 | 439 | RI MA IN NH NY | 1 |
| *Lesteva pallipes* (LeConte) * | M. K. Thayer 1996 [c15] | c15 | 438 | RI IN NF NY PQ | 1, 4 |
| *Proteinus atomarius* Erichson | D. S. Sikes 1998 [c15] | c15, p79e | 429 | RI MA | 1, 4 |
| *Batrisodes temporalis* Casey* | D.S. Chandler 1983 [c13] | c13 | 594 | RI PA | 1, 2 |

*.....continued on the next page*

  

**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| *Batrisodes temporalis* Casey* | D.S. Chandler 1983 [c13] | c13 | 594 | RI PA | 1, 2 |
| *Sepedophilus crassus* (Gravenhorst) | A. Davies 2000 [c15] | c15, u62e, c13 | 482 | RI ME MI NY ON PA PQ WI | 1, 2, 3, 5 |
| *S. occultus* (Casey) | A. Davies 2000 [c15] | c15, u62e | 481 | RI MA IL MD NJ NY OH | 1, 2, 5 |
| *Tachinus basalis* Erichson | A. Davies 2000 [c15] | c15 | 473 | RI MA ME MI NH NS NY ON PA PQ WI | 1, 3, 4, 5 |
| *T. fumipennis* (Say) | A. Davies 2000 [c15] | c15 | 474 | RI ME ON PQ | 1, 2, 5 |
| *T. luridus* Erichson* | A. Davies 2000 [c15] | c15, u62e, c37 | 474 | RI IL IN MD NY OH ON PA PQ | 1, 2, 5 |
| *T. minimus* Campbell | A. Davies 2000 [c15] | c15 | 474 | RI MA MD MI NH NJ NY OH PA PQ | 1, 2 |
| *Bolitobius analis* (Paykull) | J. M. Campbell [c48] | c48 | 463 | RI MA IN PA | 1, 4 |
| *Carphacis intrusus* (Horn) | A. Davies 2000 [c15] | c15, p79e | 467 | RI CT MA IL MD ME MI NH NJ NY OH ON PQ WI | 1, 2, 5 |
| *Lordithon angularis* (Sachse) | D. S. Sikes 2000 [c15] | c15, u62e, p79e | 466 | RI CT MA MD NJ PA | 1, 2, 3, 5 |
| *L. niger* (Gravenhorst) | D. S. Sikes 1996 [c15] | c15, p79e | 466 | RI CT IL IN MI NJ NY OH ON PA PQ VT | 1, 2, 3, 5 |
| *Mycetoporus consors* LeConte | A. Davies 2000 [c15] | c15, u62e | 470 | RI CT MA IL IN MD ME MI NB NH NJ NS NY OH ON PA PQ VT WI | 1, 2, 4, 5 |
| *M. lucidulus* LeConte | A. Davies 2000 [c15] | c15, u62e, p79e | 470 | RI CT MA DC IL IN MD ME MI NB NH NJ NS NY OH ON PA PQ VT WI | 1, 2, 3, 5 |
| *Aleochara curtula* (Goeze) | M. Maruyama 2000 [c15] | c15 | 533 | RI MA IL ME NB NF NJ NS NY ON PA PQ VT | 1, 5 |
| *Eumicrota corruscula* (Erichson) | unknown | c13 | 544 | RI MA IN NY | 1, 2, 3, 5 |
| *Baeocera picea* Casey | R. Leschen 1996 [c15] | c15 | 368 | RI MA IL ME MI NJ NY WI | 1, 2 |
| *Scaphisoma convexum* Say | R. Leschen 1996 [c15] | c15 | 366 | RI MA IN MI NY PQ | 1, 2, 5 |
| *S. impunctatum* Reitter | unknown | c13 | 366 | RI MA | 1, 5 |
| *S. rubens* Casey | R. Leschen 1996 [c15] | c15 | 366 | RI MA NY | 1 |
| *Bledius philadelphicus* Fall | L. Herman 2000 [c15] | c15, p27e | 453 | RI MA MD NF NJ NY ON PA | 1 |
| *Thinodromus corvinus* (Casey) | D. S. Sikes 1998 [c15] | c15 | 442 | RI MA | 1 |
| *Oxytelus pennsylvanicus* Erichson* | A. Davies 2000 [c15] | c15 | 447 | RI IN MI NY PQ | 1 |
| *Oxyporus kiteleyi* Campbell | D. S. Sikes 1998 [c15] | p66e, c15 | 459 | RI MA PQ | 1, 2 |
| *O. quinquemaculatus* LeConte | A. F. Newton 1996 [c15] | c15 | 458 | RI MA IN MD MI NH NS NY OH ON PA PQ VT | 1, 2 |
| *O. rufipennis* LeConte | M. K. Oliver 1990 [c13] | c3e, u62e, c13 | 458 | RI MA IL IN MD ME NH NJ NY ON PA PQ VT | 1, 2, 5 |
| *Stenus carninicollis* Casey* | unknown | c13 | 491 | RI MI | 1 |
| *S. colonus* Erichson | unknown | p79e, c13 | 491 | RI CT MA IN MI NH NJ NY | 1, 2, 5 |
| *S. erythropus* Melsheimer | unknown | u62e, c13 | 490 | RI MA IN MI NY | 1 |
| *S. nanus* Stephens | unknown | c13 | 489 | RI MA IN MI NY WI | 1, 4, 5 |
| *S. neglectus* Casey | unknown | c13 | 490 | RI MA IN MI NY ON | 1, 5 |
| *S. punctatus* Erichson | unknown | u62e, c13 | 494 | RI MA IN MI NY ON | 1, 2 |
| *S. scabiosus* Casey* | unknown | c13 | 490 | RI IN MI | 1 |
| *S. strangulatus* Casey* | unknown | u62e, c13 | 490 | RI IN MI NY | 1 |
| *S. tenuis* Casey | unknown | u62e, c13 | 490 | RI MA MI ON | 1 |
| *Edaphus politus* Motschulsky* | A. Davies 2000 [c15] | c15 | 461 | RI IN | 1, 2, 3 |
| *Achenomorphus corticinus* (Gravenhorst)* | A. F. Newton 1996 [c15] | c15 | 404 | RI IN NY PA | 1, 2, 5 |

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**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| *Astenus binotatus* (Say) * | M. K. Oliver 1993 [c13] | u62e, c13 | 424 | RI IN NY PQ | 1, 2 |
| *Homaeotarsus capito* (Casey) * | A. Davies 2000 [c15] | c15 | 422 | RI IL IN NY OH PA | 1, 2, 5 |
| *Paederus littorarius* Gravenhorst * | unknown | u62e, c20 | 420 | RI IN NY OH ON PA PQ | 1, 4 |
| *Gyrohypnus campbelli* Smetana | A. Smetana 2000 [c15] | c15, p79e | 401 | RI CT MA MI NH ON PQ | 1, 5 |
| *Leptacinus intermedius* Donisthorpe | A. Smetana 2000 [c15] | c15, u62e, p79e | 399 | RI CT MA IL IN NH NY OH ON PA PQ | 1, 3, 4, 5 |
| *Neohypnus melanops* (Casey) | A. Smetana 2000 [c15] | c15 | 401 | RI MA IL IN MD NJ NY ON PA PQ | 1, 2, 3, 5 |
| *Xantholinus linearis* (Olivier) | A. Smetana 2000 [c15] | c15 | 402 | RI MA NH NS NY PA | 1, 3, 4 |
| *Bisnius quediinus* (Horn) * | A. Smetana 2000 [c15] | c15 | 380 | RI MI PQ | 1, 5 |
| *B. sordidus* (Gravenhorst) * | A. Smetana 2000 [c15] | c15, u62e | 380 | RI NF ON PQ | 1, 2, 3, 4, 5 |
| *Erichsonius nanus* (Horn) | A. Smetana 2000 [c15] | c15 | 374 | RI MA IL ME NB NF NH NJ NS NY ON PQ WI | 1, 4, 5 |
| *E. patella* (Horn) | A. Smetana 2000 [c15] | c15 | 373 | RI MA DC IL IN MI NH NJ NY ON PA PQ | 1, 2 |
| *Hemiquedius ferox* (LeConte) * | A. Smetana 2000 [c15] | c15 | 394 | RI MD MI NF NY ON PA PQ WI | 1, 2, 5 |
| *Ocypus nitens* (Schrank) * | A. F. Newton 1996 [c15] | c15, p73e | na | | |
| *Philonthus carbonarius* (Gravenhorst) | A. Smetana 2000 [c15] | c15, u62e | 377 | RI MA IN NF NJ NY PQ WI | 1, 2, 3, 4, 5 |
| *P. rufulus* Horn | unknown | u62e, c20 | na | RI CT | |
| *P. sericans* (Gravenhorst) * | A. Smetana 2000 [c15] | c15, u62e | 379 | RI IN NY ON PA PQ | 1, 2, 3, 5 |
| *Platydracus tomentosus* (Gravenhorst)* | A. Smetana 2000 [c15] | c15, u62e | 386 | RI IL IN MD | 1, 2, 4 |
| *P. viridanus* (Horn) | A. F. Newton 1996 [c15] | c15 | 386 | RI MA IN MI PQ | 1 |
| *P. zonatus* (Gravenhorst) * | A. F. Newton 1996 [c15] | c15 | na | | |
| *Tasgius melanarius* Heer * | A. Smetana 2000 [c15] | c15 | na | | |
| *Tympanophorus puncticollis* (Erichson)* | A. F. Newton 1979 [c12] | c12 | 387 | RI MI PQ | 1, 4 |
| **Lucanidae [ 5 / 1 ]** | | | | | |
| *Platycerus piceus* Kirby * | D. S. Sikes 1998 [c15] | c15 | 630 | RI MD NF ON PQ | 1, 4, 5 |
| **Trogidae [ 11 / 5 ]** | | | | | |
| *Trox aequalis* Say * | P. K. Lago 1998 [c15] | c15, c13 | 667 | RI IL IN MD NJ ON PA PQ | 1, 2, 3, 5 |
| *T. hamatus* Robinson | P. K. Lago 1998 [c15] | c15 | 667 | RI IN ME NY | 1, 2, 3, 5 |
| *T. laticollis* LeConte | P. K. Lago 1998 [c15] | c15 | 666 | RI MA IN NY PA | 1, 5 |
| *T. scaber* (Linnaeus) | P. K. Lago 1998 [c15] | c15, p79e, c20, c37 | 667 | RI MA IL IN MD MI NJ NY ON PA PQ WI | 1, 2, 3, 4, 5 |
| *T. variolatus* Melsheimer | P. K. Lago 1998 [c15] | c15, p79e | 667 | RI MA DE IL IN MD MI NH NJ NY OH ON PA WI | 1, 2, 3, 5 |
| **Geotrupidae [ 9 / 3 ]** | | | | | |
| *Bolboceras cornigerus* Melsheimer | unknown | c20 | 658 | RI MD NJ NY PA VT | 1, 2, 5 |
| *B. liebecki* (Wallis) | P. K. Lago 1998 [c15] | c15, p79e, p34, c37 | 658 | RI CT MD MI NJ NY ON PQ VT WI | 1, 2, 5 |
| *Geotrupes hornii* Blanchard | P. K. Lago 1998 [c15] | c15, p79e, p34 | 661 | RI CT MA DC IL IN MD ME MI NH NJ NY OH PA WI | 1, 2, 5 |
| **Scarabaeidae [ 103 / 30 ]** | | | | | |
| *Aegialia humeralis* Brown | P. Harpootlian 2000 [c43] | c43 | 642 | RI MA NY | 1 |
| *Aphodius badipes* Melsheimer * | P. K. Lago 1998 [c15] | c15 | 647 | RI IL IN PA | 1, 5 |

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**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| *A. haemorrhoidalis* (Linnaeus) * | P. K. Lago 1998 [c15] | c15, c20 | 645 | RI IN NJ NY PQ | 1, 4, 5 |
| *A. pseudolividus* Balthasar | P. K. Lago 1998 [c15] | c15, p79e | 648 | RI CT MA IN NY | 1, 2 |
| *A. rubripennis* Horn * | P. K. Lago 1998 [c15] | c15 | 647 | RI MD NY ON PA PQ | 1, 2, 5 |
| *A. rusicola* Melsheimer * | P. K. Lago 1998 [c15] | c15 | 649 | RI IN MD NY ON PA | 1, 2, 3, 5 |
| *A. serval* Say * | unknown | c13 | 648 | RI IN NY PA | 1, 2, 3, 5 |
| *Dialytes striatulus* (Say) * | P. K. Lago 1998 [c15] | c15, c20 | 649 | RI IL IN MD NY ON PA PQ | 1, 2 |
| *D. truncatus* (Melsheimer) * | P. K. Lago 1998 [c15] | c15 | 649 | RI IN MD MI NY ON PA PQ | 1 |
| *D. ulkei* (Horn) * | P. K. Lago 1998 [c15] | c15 | 649 | RI MD PA PQ | 1 |
| *Onthophagus orpheus* (Panzer) | P. K. Lago 1998 [c15] | c15, p79e, c13, c37 | 639 | RI CT MA IL IN MD ME MI NH NJ NY OH ON PA WI | 1, 2, 3, 5 |
| *O. taurus* (Schreber) * | D. S. Sikes 1999 [c15] | c15 | na | | |
| *Hoplia trivialis* Harold | unknown | c13 | 686 | RI MA IN MD MI NY ON PA PQ WI | 1, 2, 3 |
| *Maladera castanea* (Arrow) * | P. K. Lago 1998 [c15] | c15, p79e | 672 | RI NJ NY | 1 |
| *Nipponoserica peregrina* (Chapin) | P. K. Lago 1998 [c15] | c15 | 671 | RI MA NY PA | 1 |
| *Serica georgiana* Leng | P. K. Lago 1998 [c15] | c15, c20 | 670 | RI MA IN MD ON PQ | 1, 2, 3 |
| *S. trociformis* Burmeister | unknown | p79e, c13, c20, c37 | 672 | RI CT NJ | 1 |
| *Amphimallon majalis* Razoumowski * | P. K. Lago 1998 [c15] | c15 | 684 | RI NY ON | 1 |
| *Phyllophaga drakii* (Kirby) | M. W. Sanderson ë74 [c13] | c15, c13, c20 | 683 | RI MD ME NB NS NY ON PA PQ | 1, 2, 3, 5 |
| *P. marginalis* (LeConte) * | P. K. Lago 1998 [c15] | c15 | 683 | RI IL IN MD NY OH ON PA PQ | 1, 2, 3 |
| *Diplotaxis atlantis* Fall | P. K. Lago 1998 [c15] | c15 | 673 | RI MD ME MI NY | 1, 2, 3, 5 |
| *Dichelonyx albicollis* (Burmeister) * | P. K. Lago 1998 [c15] | c15 | 684 | RI IN MD MI NS NY ON PA | 1, 2 |
| *D. diluta* Fall * | D. S. Sikes 2000 [c15] | c15 | 685 | RI IN MD NS ON PQ | 1, 2 |
| *Anomala innuba* (Fabricius) | unknown | c13 | 689 | RI MA MD MI NY WI | 1, 2, 3 |
| *A. oblivia* Horn | D. S. Sikes 2000 [c15] | c15 | 689 | RI MA IN MD MI NY ON PA PQ WI | 1, 2 |
| *A. orientalis* (Waterhouse) | P. K. Lago 1998 [c15] | c15, p79e, c13 | 689 | RI CT NJ NY | 1 |
| *Popillia japonica* Newman | P. K. Lago 1998 [c15] | c15 | 690 | RI MA IL IN MD NJ NY OH ON PA | 1, 2, 5 |
| *Cremastocheilus castaneus* Knoch | unknown | c13 | 699 | RI MA IL IN NY ON PQ | 1, 2 |
| *Trichiotinus piger* (Fabricius) | unknown | c13, c20 | 700 | RI ME NY WI | 1, 2, 3, 5 |
| **Eucinetidae [ 2 / 1 ]** | | | | | |
| *Eucinetus strigosus* LeConte * | D. S. Sikes 1998 [c15] | c15 | 704 | RI OH PA | 1, 2 |
| **Clambidae [ 1 / 1 ]** | | | | | |
| *Clambus howdeni* Endrödy-Younga | D. S. Sikes 1995 [c15] | c15 | 709 | RI ME NH ON | 1, 2 |
| **Scirtidae [ 11 / 4 ]** | | | | | |
| *Sacodes pulchella* (Guérin-Méneville) | D. S. Sikes 1998 [c15] | c15, p79e | 705 | RI CT IN NY | 1, 3 |
| *Cyphon collaris* (Guérin-Méneville) | D. S. Sikes 1998 [c15] | c15, c13 | 707 | RI MA IN NY ON | 1, 2 |
| *C. padi* (Linnaeus) * | unknown | c13, c20 | 707 | RI IN ON PA | 1, 2, 4 |
| *Prionocyphon discoideus* (Say) * | D. S. Sikes 1998 [c15] | c15, c20 | 706 | RI IN MI NY PA | 1, 2 |
| **Buprestidae [ 66 / 28 ]** | | | | | |
| *Dicerca pugionata* (Germar) | unknown | c13 | 743 | RI MA DE MD MI NH NJ NY OH ON PA | 1, 2 |

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**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| *D. tuberculata* (Laporte & Gory) | unknown | p79e, c20 | 742 | RI CT ME MI NB NH NS NY ON PA PQ | 1, 2 |
| *Poecilonota cyanipes* (Say) | unknown | c13, c20 | 745 | RI MA IL IN MD MI NB NH NY OH ON PA PQ VT WI | 1, 2, 3, 4, 5 |
| *Spectralia gracilipes* Melsheimer | unknown | c13 | 745 | RI IL IN NY OH ON PA WI | 1, 3 |
| *Buprestis maculativentris* Say | Knull 1947 [c37] | c37 | 748 | RI MA IN ME MI NB NH NY ON PA PQ WI | 1, 3 |
| *Cypriacis fasciata* (Fabricius) | D. S. Sikes 2000 [c37] | c37 | 747 | RI IN MD ME MI NF NY OH ON PA PQ WI | 1, 2, 5, 7 |
| *Phaenops aeneola* (Melsheimer) * | unknown | c13 | 750 | RI IN MI NJ NY ON PA PQ | 1, 2 |
| *Anthaxia quercata* (Fabricius) * | unknown | c13 | 752 | RI IN NB OH ON | 1, 2, 3 |
| *Agrilaxia flavimana* (Gory) * | unknown | c13 | 752 | RI IN NY ON | 1, 2, 3 |
| *Actenodes acornis* (Say) * | unknown | c13 | 753 | RI IN MI NJ NY OH PA WI | 1, 2, 3, 5 |
| *Chrysobothris cribraria* Mannerheim | unknown | p79e, c13 | 755 | RI CT MA DC IL IN MD MI NJ NY ON PA PQ WI | 1, 2, 3 |
| *C. dentipes* (Germar) * | unknown | c13 | 756 | RI IL IN MD MI ON PA PQ WI | 1, 2, 3, 4, 5, 6, 7 |
| *C. pusilla* Gory & Laporte | unknown | c13 | 755 | RI MA DC MD MI NB NJ NY ON PA PQ | 1, 2, 5 |
| *C. rugosiceps* Melsheimer | Knull 1947 [c37] | p79e, c37 | 756 | RI CT MA DC IL IN MD MI NH NJ NY OH ON PA PQ | 1, 2, 3, 5 |
| *C. scabripennis* Gory & Laporte | unknown | c13 | 758 | RI MA ME MI NB NH NY ON PA PQ WI | 1, 2, 4, 5 |
| *C. scitula* Gory * | unknown | c13 | na | | |
| *C. sexsignata* (Say) | unknown | c13 | 758 | RI MA DC IL IN MD ME MI NJ NY OH ON PA PQ | 1, 2, 3, 5 |
| *Agrilus atricornis* Fisher | unknown | p79e, c13 | 766 | RI CT MA IL IN ON PQ | 1 |
| *A. cephalicus* LeConte | R.L. Wescott 1998 [c15] | c15, p79e, c13 | 769 | RI CT MA DC IL IN MD MI NJ NY OH ON PA PQ | 1, 2, 3, 5 |
| *A. cuprescens* (Ménétriès) | R.L. Wescott 1998 [c15] | c15, p79e, c13 | 768 | RI CT MA IN MI NJ NY ON PA PQ | 1, 5 |
| *A. cyanescens* (Ratzeburg) | R.L. Wescott 1998 [c15] | c15, p79e | 769 | RI CT MA IL IN MI NH ON WI | 1 |
| *A. egenus* Gory | Knull 1947 [c37] | p79e, c13, c37 | 771 | RI CT MA DC IL IN MD NJ NY OH ON PA PQ WI | 1, 2, 3, 5 |
| *A. fallax* Gory | R.L. Wescott 1998 [c15] | c15, p79e | 768 | RI CT DC IL IN MD NJ NY OH ON PA PQ | 1, 2, 3, 5 |
| *A. frosti* Knull | unknown | p79e, c13 | 766 | RI CT MA IL IN NY ON PA PQ | 1, 2, 5 |
| *A. olivaceoniger* Fisher | R.L. Wescott 1998 [c15] | c15, p79e | 767 | RI CT MA NH WI | 1, 2, 5 |
| *A. subcinctus* Gory * | unknown | c13 | 770 | RI DC IL IN NJ NY OH ON PA | 1, 2, 3 |
| *Taphrocerus gracilis* (Say) * | unknown | c13 | 773 | RI MD NY ON PA PQ | 1, 2, 3, 4, 5 |
| *T. nicolayi* Obenberger | unknown | c37 | 774 | RI MA IN NH NY OH ON | 1, 2, 5 |
| **Byrrhidae [ 4 / 2 ]** | | | | | |
| *Porcinolus undatus* (Melsheimer) * | D. S. Sikes 1998 [c15] | c15 | 713 | RI IN MI NY PA PQ | 1 |
| *Simplocaria semistriata* (Fabricius) * | D. S. Sikes 1999 [c15] | c15 | na | | |
| **Elmidae [ 6 / 3 ]** | | | | | |
| *Dubiraphia quadrinotata* (Say) | Chamberlain [c13] | c3e, c13, c3e7 | 732 | RI DE IL IN ME NY OH ON PA PQ VT WI | 1 |
| *Promoresia tardella* (Fall) | D. S. Sikes 2000 [c15] | c15, c3e, p79e, p41e | 733 | RI CT MA MD NJ NY ON PA PQ | 1, 2 |

*.....continued on the next page*

  

**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| *Stenelmis crenata* (Say) | D. S. Sikes 1995 [c15] | c15, p41e | 734 | RI MA IN MD NB NY ON PQ | 1, 2, 3, 5 |
| **Dryopidae [ 1 / 1 ]** | | | | | |
| *Helichus lithophilus* (Germar) * | unknown | c3e, c20 | 730 | RI MI NY ON PQ WI | 1, 2, 3, 5 |
| **Heteroceridae [ 2 / 2 ]** | | | | | |
| *Centuriatus auromicans* (Kiesenwetter)* | unknown | c37 | 726 | RI IL IN MD MI NJ NY OH ON WI | 1, 2, 3, 4, 5 |
| *Lanternarius brunneus* (Melsheimer) | unknown | p79e, c13 | 725 | RI MA IL IN MI NJ NS NY ON PA PQ VT | 1, 3, 4, 5 |
| **Psephenidae [ 2 / 1 ]** | | | | | |
| *Ectopria nervosa* (Melsheimer) | D. S. Sikes 1998 [c15] | c15, p79e, p33 | 717 | RI MA IL IN NY ON PQ | 1, 2, 3, 5 |
| **Ptilodactylidae [ 2 / 1 ]** | | | | | |
| *Ptilodactyla carinata* Johnson & Freytag * | D. S. Sikes 2000 [c15] | c15 | 720 | RI NJ NY PA | 1, 2, 3 |
| **Artematopodidae [ 1 / 1 ]** | | | | | |
| *Eurypogon niger* (Melsheimer) * | D. S. Sikes 1998 [c15] | c15, c13 | 712 | RI NY PA PQ | 1 |
| **Eucnemidae [ 6 / 4 ]** | | | | | |
| *Microrhagus pectinatus* LeConte | P. J. Johnson 1998 [c15] | c15 | 836 | RI IL IN ME MI NY ON PQ | 1, 2, 4, 5 |
| *Deltometopus amoenicornis* (Say) | unknown | p79e, c13 | 834 | RI CT MA DC DE IL IN MD ME MI NB NH NJ NS NY OH ON PA PQ VT WI | 1, 2, 3, 5 |
| *Fornax calceatus* (Say) * | unknown | c13 | na | | |
| *Dromaeolus cylindricollis* (Say) | P. J. Johnson 1998 [c15] | c15 | 834 | RI DC IL MD ME NJ NY OH ON PA WI | 1, 2, 3, 4 |
| **Throscidae [ 3 / 2 ]** | | | | | |
| *Aulonothroscus distans* (Blanchard) | D. S. Sikes 2000 [c15] | c15 | 824 | RI MA DC NY | 1, 2 |
| *Trixagus carinicollis* (Schaeffer) | D. S. Sikes 2000 [c15] | c15, c13 | 825 | RI MA DC IL IN MI NH NY VT | 1, 2, 4 |
| **Elateridae [ 94 / 36 ]** | | | | | |
| *Agriotella bigeminata* (Randall) | P. J. Johnson 1998 [c15] | c15, c13 | 788 | RI MA NS NY ON | 1 |
| *Agriotes collaris* (LeConte) | F. B. Ramberg [c13] | p79e, c13 | 804 | RI CT MA ME NB NH NS NY ON PA PQ VT | 1 |
| *A. fucosus* (LeConte) | F. B. Ramberg [c13] | c13 | 804 | RI IL IN ME MI NB NF NH NS VT WI | 1, 5 |
| *Dalopius gentilis* Brown | P. J. Johnson 1998 [c15] | c15 | 807 | RI NY ON PQ | 1 |
| *D. vagus* Brown * | F. B. Ramberg [c13] | c13 | 807 | RI CT MA NY ON PQ | 1, 2, 5 |
| *Glyphonyx inquinatus* (Say) | unknown | p79e, c13 | 814 | RI CT MA DE IL IN MD PA | 1, 2 |
| *Ampedus areolatus* (Say) | P. J. Johnson 1998 [c15] | c15, c13, c20 | 786 | RI MA IN NY ON | 1 |
| *A. collaris* (Say) | P. J. Johnson 1998 [c15] | c15, p79e, c20 | 787 | RI CT MA IN NY | 1, 2 |
| *A. luctuosus* (LeConte) * | F. B. Ramberg [c13] | c13 | 787 | RI MI NF NY | 1, 2 |
| *A. melsheimeri* (Leng) * | F. B. Ramberg [c13] | c13, c20 | 786 | RI IN MD NY | 1 |
| *A. protervus* (LeConte) | unknown | u21, c13 | 788 | RI MA NY | 1 |
| *A. rubricollis* (Herbst) | unknown | u21, c13 | 787 | RI MA IL IN MD | 1, 2, 3 |
| *Melanotus hyslopi* Van Zwaluwenberg | P. J. Johnson 1998 [c15] | c15, p79e | 819 | RI CT MA IL IN MD NH NJ NY ON PA WI | 1, 2 |
| *M. sagittarius* (LeConte) | P. J. Johnson 1998 [c15] | c15, c13, c20 | 819 | RI MA IL IN MD NJ NY | 1, 2 |
| *Sericus viridanus* (Say) * | P. J. Johnson 1998 [c15] | c15 | 808 | RI MD MI NJ NY PA | 1 |

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**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| *Oestodes tenuicollis* (Randall) | Val. 1945 [c13] | c13 | 809 | RI MA ME NH NY ON PQ VT | 1 |
| *Aeolus amabilis* (LeConte) * | P. J. Johnson 1998 [c15] | c15 | 781 | RI IN NY OH | 1, 3 |
| *A. mellillus* (Say) * | unknown | c13 | 781 | RI IN MD ON PA PQ | 1, 3 |
| *Conoderus bellus* (Say) * | P. J. Johnson 1998 [c15] | c15, c13 | 780 | RI IN MD NY PA | 1, 2, 3 |
| *C. lividus* (DeGeer) * | P. J. Johnson 1998 [c15] | c15, u21 | 780 | RI IN MD NY PA | 1, 2, 3 |
| *C. suturalis* (LeConte) * | unknown | c13 | 780 | RI IN | 1, 2, 3 |
| *Athous acanthus* (Say) | unknown | c13 | 794 | RI MA DE IL IN MD ME MI NH NJ NS OH PA PQ VT WI | 1, 2, 5 |
| *A. brightwelli* (Kirby) | P. J. Johnson 1998 [c15] | c15, u21 | 794 | RI MA IL IN ME MI NB NH NJ NS NY OH PA PQ WI | 1, 2, 5 |
| *A. cucullatus* (Say) * | P. J. Johnson 1998 [c15] | c15 | 795 | RI IN NS ON PQ | 1, 2, 3, 5 |
| *A. rufifrons* (Randall) | P. J. Johnson 1998 [c15] | c15, p79e | 794 | RI CT MA IL ME MI NF NH NJ NS ON PA PQ VT WI | 1, 2 |
| *Limonius aeger* LeConte * | F. B. Ramberg [c13] | c13 | 791 | RI NB NY ON PQ | 1, 4, 5 |
| *L. agonus* (Say) * | F. B. Ramberg [c13] | c13 | 791 | RI NY PA | 1 |
| *Ctenicera hamata* (Say) * | P. J. Johnson 1998 [c15] | c15, c13 | 801 | RI IN NJ NY | 1 |
| *C. mediana* (Germar) * | unknown | c13, c20 | 801 | RI MI NB NS NY ON PQ | 1, 5 |
| *C. resplendens* (Eschsholtz) * | D. S. Sikes 2000 [c15] | c15 | 799 | RI NY ON PQ | 1, 4 |
| *C. sjaelandica* (O. F. Müller) * | F. B. Ramberg [c13] | c13 | 798 | RI MI NJ NY ON PQ | 1 |
| *C. sulcicollis* (Say) | unknown | c13 | 800 | RI CT IN NY | 1 |
| *Oxygonus obesus* (Say) | unknown | p79e, c13 | 802 | RI CT MA IN MI NY | 1, 5 |
| *Pseudanostirus propola* (LeConte) | D. S. Sikes 2000 [c15] | c15, c13, c20 | 801 | RI MA NB NS NY ON PQ | 1, 2, 5 |
| *P. triundulata* (Randall) | D. S. Sikes 1998 [c15] | c15, c13, c20 | 801 | RI MA ME NB NH NS NY ON PQ | 1, 4, 5 |
| *Oedostethus femoralis* LeConte | unknown | c13 | 810 | RI IN ME NJ NY ON PQ | 1, 4, 5 |
| **Lycidae [ 15 / 12 ]** | | | | | |
| *Caenia dimidiata* (Fabricius) | R. S. Miller 1999 [c15] | c15, c20, c37 | 879 | RI IN ME PQ WI | 1, 2, 3, 5 |
| *Calopteron terminale* (Say) | unknown | c13, c20 | 879 | RI IN ME NY ON | 1, 2, 3, 5 |
| *Dictyoptera aurora* (Herbst) * | R. S. Miller 1999 [c15] | c15 | 874 | RI IL IN MD MI NF NY ON PA PQ WI | 1, 2, 3, 4, 5 |
| *D. thoracicus* (Randall) | R. S. Miller 1999 [c15] | c15 | 874 | RI MA IN MI ON | 1, 2, 3, 4 |
| *Eropterus trilineatus* (Melsheimer) * | R. S. Miller 1999 [c15] | c15 | 875 | RI IN MD NY ON PA | 1, 2, 3, 5 |
| *Leptoceletes basalis* (LeConte) | R. S. Miller 1999 [c15] | c15, c13, c37 | 879 | RI ME NS | 1, 2, 5 |
| *Lopheros fraternus* (Randall) | R. S. Miller 1999 [c15] | c15 | 875 | RI MA MD OH PA | 1, 2 |
| *Plateros avians* Green * | R. S. Miller 1999 [c15] | c15 | 877 | RI IL IN NJ NY OH PA | 1, 2 |
| *P. centralis* Green | R. S. Miller 1999 [c15] | c15 | 878 | RI CT IN MD MI PA | 1, 2 |
| *P. floralis* (Melsheimer) | unknown | c13 | 877 | RI CT IL IN MI NY ON | 1, 2, 3 |
| *P. lictor* (Newman) | R. S. Miller 1999 [c15] | c15 | 877 | RI MA IN MI NY ON PA PQ WI | 1, 2, 3, 4, 5 |
| *P. sollicitus* (LeConte) * | unknown | c37 | 877 | RI IL IN MD NJ NY | 1, 2, 3 |
| **Phengodidae [ 1 / 1 ]** | | | | | |
| *Phengodes plumosa* (Olivier) | D. S. Sikes 1999 [c37] | p79e, c13, c20, c37 | 838 | RI CT MA IL IN NY ON | 1, 2, 3 |
| **Lampyridae [ 16 / 6 ]** | | | | | |
| *Pyractomena borealis* (Randall) | R. S. Miller 1999 [c15] | c15, p79e, c37 | 841 | RI CT MA DC IL IN MD ME MI NB NH NJ NS NY OH ON PA PQ WI | 1, 2, 3, 5 |

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**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| *P. marginalis* Green | D. S. Sikes 2000 [c15] | c15, p79e | 841 | RI CT MA DC IL MD NH NJ NY PA | 1, 2, 3 |
| *Ellychnia autumnalis* Melsheimer * | D. S. Sikes 2000 [c15] | c15 | 847 | RI IN NY | 1, 4, 5 |
| *Photinus ardens* LeConte | unknown | p79e, c13 | 846 | RI CT MA IL IN MD ME MI NF NH NJ NS NY OH ON PA PQ WI | 1, 2, 5 |
| *P. marginalis* LeConte | R. S. Miller 1999 [c15] | c15, p79e, c13 | 844 | RI CT MA IL IN NH NJ NY OH ON PA PQ WI | 1, 2, 3, 5 |
| *P. obscurellus* LeConte | unknown | p79e, c13 | 846 | RI CT MA IL IN MD MI NF NH NJ NS NY OH ON PA PQ Wi | 1, 2, 5 |
| **Cantharidae [ 22 / 3 ]** | | | | | |
| *Ancistronycha dentiger* (LeConte) | R. S. Miller 1999 [c15] | c15, p79e, c20 | 865 | RI CT IN MD NY OH | 1, 2, 3 |
| *Cantharis livida* Linnaeus | R. S. Miller 1999 [c15] | c15 | 866 | RI MA ME | 1 |
| *Rhagonycha nigriceps* LeConte | R. S. Miller 1999 [c15] | c15 | 865 | RI MA IL MD ME NF NY ON PQ | 1, 2, 5 |
| **Derodontidae [ 1 / 1 ]** | | | | | |
| *Laricobius rubidus* LeConte * | unknown | c13 | 892 | RI DC MI NB NY ON PQ | 1 |
| **Nosodendridae [ 1 / 1 ]** | | | | | |
| *Nosodendron unicolor* Say * | D. S. Sikes 2000 [c15] | c15 | 893 | RI IL IN NY | 1, 3, 5 |
| **Dermestidae [ 17 / 3 ]** | | | | | |
| *Dermestes ater* DeGeer | J. Háva 1998 [c15] | c15 | 896 | RI MA NY PQ | 1, 2 |
| *D. cylindricus* Casey | J. Háva 1998 [c15] | c15, p79e | 896 | RI MA | 1 |
| *Anthrenus castaneae* Melsheimer | D. S. Sikes 1995 [c15] | c15, p79e | 899 | RI MA IN NY PA PQ | 1, 2, 4 |
| **Bostrichidae [ 11 / 2 ]** | | | | | |
| *Endecatomus rugosus* (Randall) * | unknown | c13, c20 | 928 | RI IL IN MD MI NY PA WI | 1, 2, 3, 5 |
| *Stephanopachys rugosus* (Olivier) * | M. A. Ivie 1983 [c13] | c13 | 929 | RI MD NY OH PA | 1, 2, 3 |
| **Anobiidae [ 21 / 4 ]** | | | | | |
| *Ernobius granulatus* (LeConte) | unknown | c13 | 909 | RI MA MD NJ NY PA | 1, 2, 3 |
| *E. tenuicornis* (LeConte) | unknown | c13 | 910 | RI MA NY PA | 1, 2 |
| *Oligomerus obtusus* LeConte | unknown | c13 | 911 | RI MA MI NJ NY ON VT | 1 |
| *Petalium alternatum* Ford * | D. S. Sikes 2000 [c15] | c15 | 919 | RI IN | 1, 2, 3 |
| **Trogossitidae [ 5 / 2 ]** | | | | | |
| *Tenebroides laticollis* Horn * | D. S. Sikes 1998 [c15] | c15 | 938 | RI IL IN MD NJ NY ON PA | 1, 2, 3, 5 |
| *T. rugosipennis* Horn * | D. S. Sikes 1998 [c15] | c15 | 939 | RI NJ PA | 1, 2, 3 |
| **Cleridae [ 20 / 12 ]** | | | | | |
| *Cymatodera bicolor* (Say) * | D. S. Sikes 1998 [c15] | c15 | 944 | RI IL IN NY OH ON PQ WI | 1, 2, 3, 5 |
| *C. inornata* (Say) | unknown | c13 | 944 | RI IL IN MD ME MI NY OH ON PA PQ WI | 1, 2, 5 |
| *Isohydnocera curtipennis* (Newman) | W. F. Barr [c13] | c13 | 951 | RI CT DC IL IN NY OH ON PQ WI | 1, 2, 5 |
| *Phyllobaenus commixtus* (Chapin) | unknown | c13 | 950 | RI MA NY | 1 |
| *P. humeralis* (Say) | W. F. Barr [c13] | p79e, c13, c20, c37 | 950 | RI MA IL IN ME NJ NY OH ON PQ | 1, 2, 3, 4, 5 |
| *P. pallipennis* (Say) * | W. F. Barr [c13] | c13, c20 | 950 | RI IL IN NY ON PA PQ WI | 1, 2, 3, 5 |
| *P. unifasciata* (Say) | W. F. Barr [c13] | c13, c20 | 949 | RI IL IN ME MI OH ON PA PQ | 1, 2, 3 |
| *P. verticalis* (Say) | D. S. Sikes 2001 [c20] | c20 | 950 | RI IL IN NH NY OH ON PA | 1, 2, 3, 5 |
| *Enoclerus analis* (LeConte) * | D. S. Sikes 1998 [c15] | c15 | 948 | RI IL NY OH | 1, 3, 4, 5, 6 |

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**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| *E. nigrifrons* (Say) | unknown | c13 | 947 | RI MA IN NY OH ON PA | 1, 2, 5 |
| *E. rosmarus* (Say) | unknown | c13 | 947 | RI MA DC IL IN ME NY OH PA | 1, 2, 5 |
| *Madoniella dislocatus* (Say) | D. S. Sikes 2001 [c20] | c20 | 952 | RI IL IN NJ NY OH ON PA PQ WI | 1, 2, 3, 5 |
| **Melyridae [ 12 / 8 ]** | | | | | |
| *Anthocomus bipunctatus* (Harrer) * | D. S. Sikes 2001 [c15] | c15 | 959 | RI DC IN PA | 1 |
| *Attalus morulus* LeConte | unknown | p79e, c13, c20 | 961 | RI CT DC IN NY ON PQ | 1, 2, 3, 4, 5 |
| *A. pallifrons* Motschulsky | unknown | c13 | 961 | RI CT DC IN NY ON | 1, 5 |
| *A. scincetus* (Say) | unknown | p79e, c13, c20 | 962 | RI MA IN MD NY PA | 1, 2, 3, 5 |
| *A. terminalis* Erichson | unknown | c13 | 961 | RI CT IN MD NY | 1, 2, 5 |
| *Collops tricolor* (Say) | unknown | p79e, c13, c20 | 958 | RI CT NY PQ | 1, 2 |
| *Hypebaeus apicalis* (Say) * | unknown | c13 | 959 | RI IL IN MD NY ON PA PQ | 1, 2 |
| *Malachius aeneus* (Linnaeus) | D. S. Sikes 1995 [c15] | c15, p79e, c13, c20, c37 | 959 | RI CT IN NY ON | 1, 4 |
| **Sphindidae [ 3 / 2 ]** | | | | | |
| *Odontosphindus denticollis* LeConte | M. A. Ivie 1995 [c15] | c15 | 1003 | RI IN ME MI NH NY ON PQ | 1 |
| *Eurysphindus hirtus* LeConte | W.L. Krinsky 1998 [c15] | c15 | 1003 | RI MA IL IN PA | 1, 2, 3, 5 |
| **Brachypteridae [ 3 / 2 ]** | | | | | |
| *Brachypterolus pulicarius* (Linnaeus) * | D. S. Sikes 1998 [c15] | c15, c20 | 965 | RI NS NY PA PQ WI | 1, 4, 5 |
| *Brachypterus urticae* (Fabricius) * | unknown | c20 | 965 | RI ON PQ WI | 1, 2, 5 |
| **Nitidulidae [ 30 / 13 ]** | | | | | |
| *Carpophilus melanopterus* Erichson | D. S. Sikes 1995 [c15] | c15 | 967 | RI CT IL IN MD NJ NY | 1, 2, 3, 5, 6 |
| *Epuraea helvola* Erichson * | unknown | c13, c20 | 972 | RI IN NJ NY ON PA PQ | 1, 2, 5 |
| *E. labilis* Erichson * | unknown | c13 | 974 | RI IN ON PQ | 1, 2, 3, 4, 5 |
| *Meligethes nigrescens* Stephens * | D. S. Sikes 1998 [c15] | c15 | 981 | RI IN MD OH ON PQ | 1, 4 |
| *Phenolia grossa* (Fabricius) * | unknown | c13 | 978 | RI IN ON | 1, 2, 3, 4, 5 |
| *Stelidota octomaculata* (Say) | D. S. Sikes 1998 [c15] | c15, c13 | 975 | RI MA IN MI ON PQ WI | 1, 2, 3, 5 |
| *Conotelus obscurus* Erichson * | D. S. Sikes 1995 [c15] | c15, c37 | 965 | RI MD NY ON PA PQ WI | 1, 2, 5 |
| *Cryptarcha cocinna* Melsheimer | unknown | c13 | 981 | RI MA IN NY OH PQ | 1, 2, 3, 4 |
| *Glischrochilus fasciatus* (Olivier) * | D. S. Sikes 1995 [c15] | c15, c13, c20, c37 | 983 | RI IN OH ON PQ | 1, 2, 3, 4, 5 |
| *G. obtusus* (Say) | D. S. Sikes 2000 [c15] | c15 | 982 | RI MA IN MI NY | 1, 2 |
| *G. sanguinolentus* (Olivier) * | D. S. Sikes 1998 [c15] | c15, c13, c20, c37 | 982 | RI IN ON PA PQ WI | 1, 2, 3, 4, 5 |
| *G. siepmanni* Brown * | D. S. Sikes 1998 [c15] | c15 | 983 | RI MD MI NY ON PQ WI | 1, 2, 4, 5 |
| *Cybocephalus nigritulus* LeConte * | unknown | c13 | 983 | RI IN MI | 1, 2 |
| **Monotomidae [ 5 / 2 ]** | | | | | |
| *Rhizophagus sculpturatus* Mannerheim * | unknown | c13 | 986 | RI IN NY PQ | 1, 3, 4 |
| *Monotoma fulvipes* Melsheimer * | D. S. Sikes 1995 [c15] | c15 | 987 | RI IL IN NY PA | 1, 2 |
| **Silvanidae [ 6 / 4 ]** | | | | | |
| *Telephanus velox* (Haldeman) * | D. S. Sikes 1995 [c15] | c15 | 992 | RI IN NY ON PA | 1, 5 |
| *Uleiota debilis* (LeConte) * | D. S. Sikes 1995 [c15] | c15 | 992 | RI IN NY ON PQ | 1, 5 |

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**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| *Cathartosilvanus imbellis* (LeConte) | D. S. Sikes 1998 [c15] | c15, p79e, c13 | 996 | RI CT MA MI NH NY ON PQ | 1, 2, 3, 4, 5 |
| *Silvanus bidentatus* (Fabricius) * | unknown | c13 | 995 | RI NY ON PQ | 1, 3 |
| **Laemophloeidae [ 5 / 3 ]** | | | | | |
| *Laemophloeus biguttatus* (Say) | unknown | p79e, c13, c20 | 1000 | RI MA IL IN MD ME MI NH NY OH ON PA PQ | 1, 2, 3, 4, 5 |
| *Placonotus modestus* (Say) * | D. S. Sikes 1998 [c15] | c15 | 1001 | RI IL MD NJ NY | 1, 2, 3, 6 |
| *P. zimmermanni* (LeConte) * | D. S. Sikes 1998 [c15] | c15, c13 | 1001 | RI IL IN MD MI NJ NY OH ON PA WI | 1, 2, 3, 5 |
| **Phalacridae [ 9 / 1 ]** | | | | | |
| *Stilbus nitidus* (Melsheimer) * | unknown | c13, c37 | 1028 | RI IN MD NY PA | 1, 2, 3, 5 |
| **Cryptophagidae [ 7 / 4 ]** | | | | | |
| *Antherophagus ochraceus* Melsheimer | unknown | c37 | 1005 | RI MA IN NF NY PQ | 1, 4 |
| *Cryptophagus dentatus* (Herbst) * | D. S. Sikes 1999 [c15] | c15 | 1008 | RI MD MI NY | 1, 4 |
| *Henoticus serratus* (Gyllenhal) | D. S. Sikes 1999 [c15] | c15 | 1010 | RI MA IN LB MI NH NY PA PQ | 1, 3, 4, 5 |
| *Telmatophilus americanus* LeConte | R. Leschen 1996 [c15] | c15 | 1005 | RI MA IN NY PQ | 1, 5 |
| **Erotylidae [ 6 / 2 ]** | | | | | |
| *Triplax macra* LeConte | M. A. Goodrich [c13] | c13 | 1021 | RI MA IL ME MI NH NY OH ON PA | 1, 2, 3, 5 |
| *Tritoma unicolor* Say | unknown | p79e, c20 | 1023 | RI CT MA IL IN MD MI NJ NY OH ON PA WI | 1, 2, 3, 5 |
| **Coccinellidae [ 62 / 6 ]** | | | | | |
| *Hyperaspis disconotata* Mulsant | unknown | p67e, c37 | 1050 | RI MA NY ON PQ WI | 1, 5 |
| *Didion nanum* (LeConte) | unknown | p67e, c20 | 1040 | RI MA IL ON PA | 1, 5 |
| *Exochomus marginipennis* (LeConte) * | R. D. Gordon 1987 [c13] | c13, c20 | 1053 | RI DE IL IN MD NJ NY OH PA | 1, 2, 3, 5 |
| *Coccinella monticola* Mulsant | L. J. Orsak 1976 [c13] | c13 | 1060 | RI MA ME NB NH NS NY ON PQ VT | 1, 3, 4, 5 |
| *Harmonia axyridis* (Pallas) * | D. S. Sikes 1995 [c15] | c15 | na | | |
| *Propylae quatuordecimpunctata* (Linnaeus) | D. S. Sikes 1995 [c15] | c15, p79e | 1061 | RI MA ME NY ON PQ VT | 1 |
| **Corylophidae [ 8 / 5 ]** | | | | | |
| *Orthoperus micros* Casey * | unknown | c13 | 1034 | RI IL IN | 1 |
| *Gloeosoma fuscicornis* (Casey) * | unknown | c13 | 1034 | RI ON | 1 |
| *Sericoderus lateralis* (Gyllenhal) | D. S. Sikes 1998 [c15] | c15 | 1035 | RI MA IN MI NY ON PQ | 1, 2, 4, 5 |
| *S. obscurus* LeConte * | unknown | c13 | 1035 | RI IN MI NY ON PA | 1, 2 |
| *Clypastrea ornata* (Casey) * | unknown | c13 | 1036 | RI IN NY | 1, 5 |
| **Latridiidae [ 15 / 8 ]** | | | | | |
| *Adistemia watsoni* (Wollaston) * | Fisher [c37] | c37 | 1070 | RI DC | 1, 6, 7 |
| *Aridius nodifer* (Westwood) * | F. G. Andrews 1999 [c15] | c15 | na | | |
| *Microgramme arga* (Reitter) | L. M. Walkney [c37] | c37 | na | | |
| *Corticaria ferruginea* (Marsham) * | unknown | c13 | na | | |
| *C.fulva* (Comolli) * | unknown | c20 | 1071 | RI MI | 1, 5 |
| *Melanophthalma aculifera* Fall * | F. G. Andrews 1999 [c15] | c15 | na | | |
| *M. picta* (LeConte) | unknown | c13 | 1073 | RI MA IN NY | 1, 2, 3 |

*.....continued on the next page*

  

**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| **Mycetophagidae [ 8 / 3 ]** | | | | | |
| *Litargus nebulosus* (LeConte) * | unknown | c13 | 1115 | RI DC IN MD NJ NY PA WI | 1, 2, 3, 4, 5 |
| *Mycetophagus flexuosus* Say * | unknown | c13, c20 | 1114 | RI IN MD OH | 1, 2, 3, 5 |
| *Thrimolus minutus* Casey * | R. Leschen 1996 [c15] | c15 | 1115 | RI DC IN OH PA | 1, 2, 3 |
| **Ciidae [ 16 / 5 ]** | | | | | |
| *Cis cornutus* Blatchley * | unknown | c13 | 1123 | RI IL IN MD NY PA | 1, 2 |
| *C. creberrimus* Mellié | unknown | c13, c37 | 1123 | RI MD NJ VT | 1, 2, 3, 5, 6 |
| *C. levettei* (Casey) * | unknown | c13 | 1123 | RI MD NF NS NY ON PA PQ | 1, 2, 3, 4, 5 |
| *C. ursulinus* (Casey) | unknown | c13, c37 | 1124 | RI IN | 1, 2 |
| *Orthocis punctatus* (Mellié) | W.L. Krinsky 1998 [c15] | c15 | 1121 | RI MA IN LB MD NF NY ON PA PQ | 1, 2, 3, 5 |
| **Tetratomidae [ 6 / 1 ]** | | | | | |
| *Holostrophus discolor* Horn * | D. A. Pollock 1999 [c15] | c15 | 1144 | RI PA PQ | 1 |
| **Melandryidae [ 9 / 5 ]** | | | | | |
| *Microtonus sericans* LeConte | D. A. Pollock 1999 [c15] | c15 | 1149 | RI IN ME NY | 1, 2, 3 |
| *Symphora flavicollis* (Haldeman) | D. A. Pollock 1999 [c15] | c15 | 1149 | RI IN ME NY PQ | 1, 2, 3 |
| *Microscapha clavicornis* LeConte * | D. A. Pollock 1999 [c15] | c15 | 1145 | RI IL | 1, 2 |
| *Phloeotrya vaudoueri* Mulsant * | D. A. Pollock 1999 [c15] | c15 | 1148 | RI IN NS NY PQ | 1, 2, 5 |
| *Spilotus quadripustulatus* (Melsheimer) * | unknown | c13 | 1147 | RI CT IN NY | 1 |
| **Mordellidae [ 17 / 12 ]** | | | | | |
| *Hoshihananomia octopunctatus* (Fabricius) * | D. S. Sikes 1998 [c15] | c15 | 1156 | RI IL IN MD MI NJ NY OH PA WI | 1, 2, 3, 5 |
| *Mordella atrata* Melsheimer * | J. A. Jackman 1996 [c15] | c15 | 1158 | RI NF NS ON PQ | 1, 4, 5 |
| *Mordellaria serval* (Say) | J. A. Jackman 1996 [c15] | c15 | 1157 | RI IL IN MD ME MI NY OH ON PA PQ | 1, 3, 5 |
| *Glipostenoda ambusta* (LeConte) * | J. A. Jackman 1996 [c15] | c15 | 1170 | RI IL IN MD NJ NY OH PA | 1, 2, 3, 5 |
| *Mordellistena andreae* LeConte | J. A. Jackman 1996 [c15] | c15 | 1167 | RI MA IL IN MD MI NJ NY OH PA | 1, 2, 3 |
| *M.cervicalis* LeConte | D. S. Sikes 2000 [c15] | c15 | 1166 | RI MA IL IN MD ME MI NH NJ NY OH ON PA PQ | 1, 2, 3, 5 |
| *M. pauxilla* Liljeblad * | J. A. Jackman 1996 [c15] | c15 | 1165 | RI IL | 1 |
| *M. splendens* Smith * | J. A. Jackman 1996 [c15] | c15 | 1168 | RI MD NJ NY OH PA | 1, 2, 5 |
| *M. trifasciata* (Say) | J. A. Jackman 1996 [c15] | c15 | 1165 | RI MA IL IN MD ME MI NH NJ NY OH PA | 1, 2, 3, 5 |
| *M. unicolor* LeConte * | unknown | c37 | 1170 | RI IN OH | 1, 2, 3, 4 |
| *Falsomordellistena. pubescens* (Fabricius) | J. A. Jackman 1996 [c15] | c15, p79e | 1169 | RI CT MA IL IN MD ME NJ NY OH PA | 1, 2, 3, 5 |
| *Mordellina pustulata* (Melsheimer) | J. A. Jackman 1996 [c15] | c15, p79e | 1169 | RI CT MA IL IN MD ME MI NH NJ NY OH ON PA VT | 1, 2, 3 ,4 ,5 |
| **Ripiphoridae [ 3 / 1 ]** | | | | | |
| *Ripiphorus fasciatus* (Say) | unknown | c13 | 1175 | RI CT IL IN NY PA | 1, 5 |
| **Colydiidae [ 2 / 2 ]** | | | | | |
| *Eucicones marginalis* (Melsheimer) * | unknown | c13 | 1130 | RI DC IL IN NJ ON PA | 1, 2, 3, 5 |
| *Synchita fuliginosa* Melsheimer | M. A. Ivie 1995 [c15] | c15 | 1129 | RI DC IL IN MD NH NJ NY OH ON PA VT | 1, 2, 3, 5 |

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**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| **Tenebrionidae [ 48 / 10 ]** | | | | | |
| *Anaedus brunneus* (Ziegler) * | D. S. Sikes 2000 [c15] | c15, c13 | 1095 | RI IN MD NY PA | 1, 2 |
| *Paratenetus punctatus* Spinola * | unknown | c13 | 1095 | RI IN NY | 1, 2 |
| *Bolitotherus cornutus* (Panzer) | C.A. Triplehorn 1998 [c15] | c15, p79e, c13, c20, c37 | 1082 | RI CT MA IN NY ON | 1, 2, 3, 5 |
| *Androchirus femoralis* (Olivier) * | unknown | c13 | 1107 | RI OH | 1, 2 |
| *Mycetochara foveata* (LeConte) * | unknown | c13 | 1105 | RI IN MI NY ON PQ | 1, 2, 5 |
| *Alobates morio* Fabricius * | D. S. Sikes 2000 [c15] | c15 | 1094 | RI IN NY | 1, 3 |
| *Haplandrus fulvipes* (Herbst) | C.A.Triplehorn 1998 [c15] | c15, p79e | 1093 | RI CT IN NY | 1 |
| *Merinus laevis* (Olivier) * | D. S. Sikes 2001 [c20] | c20 | 1093 | RI IL IN NY | 1, 2 |
| *Xylopinus aenescens* LeConte | D. S. Sikes 2000 [c15] | c15 | 1093 | RI CT IN NJ NY | 1, 2 |
| *Strongylium tenuicolle* (Say) * | C.A.Triplehorn 1998 [c15] | c15 | 1097 | RI MD NY ON PA PQ | 1, 2, 3, 5 |
| **Synchroidae [ 1 / 1 ]** | | | | | |
| *Synchroa punctata* Newman | D. A. Pollock 1999 [c15] | c15, p79e, c13, c20 | 1143 | RI CT IN NY | 1, 2, 3 |
| **Oedemeridae [ 2 / 1 ]** | | | | | |
| *Asclera ruficollis* (Say) | D. S. Sikes 1998 [c15] | c15, p79e, c13 | 1139 | RI CT MA DC IL IN MD MI NS NY OH ON PA Q WI | 1, 2, 5 |
| **Stenotrachelidae [ 1 / 1 ]** | | | | | |
| *Cephaloon lepturides* Newman | unknown | c3e, p79e, c13 | 1077 | RI MA IN NY PA PQ | 1, 2 |
| **Meloidae [ 14 / 4 ]** | | | | | |
| *Epicauta fabricii* (LeConte) | J. D. Pinto 1973 [c13] | p79e, c13 | 1182 | RI CT MA IL IN MD ME NJ NY PA WI | 1, 2, 3, 4, 5 |
| *E. torsa* (LeConte) | J. D. Pinto 1973 [c13] | c13 | 1182 | RI MA IN | 1, 2, 3 |
| *Lytta aenea* Say | J. D. Pinto 1972 [c13] | c15, p79e, c13 | 1179 | RI CT MA IL IN MD NH NJ NY OH PA | 1, 2, 3, 5 |
| *Meloe dianella* Pinto & Selander | J. D. Pinto 1972 [c13] | p79e, c13 | 1178 | RI CT MA IL IN ME NF NH NJ NY OH ON PA PQ VT | 1, 2, 3, 4, 5 |
| **Boridae [ 2 / 1 ]** | | | | | |
| *Lecontia discicollis* (LeConte) * | D. S. Sikes 2001 [c20] | c13, c20 | 1111 | RI NY | 1, 3, 4, 5 |
| **Pyrochroidae [ 6 / 1 ]** | | | | | |
| *Dendroides concolor* (Newman) | unknown | p79e, c13 | 1135 | RI CT MA IL IN MD ME NF NH NJ NS NY ON PA PQ VT WI | 1, 2, 5 |
| **Salpingidae [ 2 / 2 ]** | | | | | |
| *Rhinosimus viridiaeneus* Randall | D. S. Sikes 1998 [c15] | c15 | 1112 | RI MA IN ME NY PQ | 1, 2, 4 |
| *Sphaeriestes virescens* (LeConte) * | unknown | c13 | 1111 | RI IN LB MI NY PQ | 1, 5 |
| **Anthicidae [ 14 / 4 ]** | | | | | |
| *Anthicus ephippium* LaFerte | D. S. Chandler 1996 [c15] | c15, p79e, c13 | 1192 | RI CT MA IL IN MD NJ NY ON | 1, 2, 3, 4, 5, 6 |
| *A. haldemani* LeConte | D. S. Sikes 1998 [c15] | c15 | 1192 | RI MA IL IN MI NF NY ON PA | 1, 2, 3, 5 |
| *A. melancholicus* LaFerte | D. S. Chandler 1996 [c15] | c15, c13 | 1192 | RI MA IL IN MI NJ NY PA PQ | 1, 2, 3, 5 |
| *Sapintus fulvipes* (LaFerte) | D. S. Chandler 1983 [c13] | c15, p79e, c13 | 1190 | RI CT MA IN MD MI NJ NY OH ON PA WI | 1, 2, 3, 4, 5 |
| **Aderidae [ 4 / 3 ]** | | | | | |
| *Elonus basalis* (LeConte) | D. S. Sikes 1998 [c15] | c15 | 1199 | RI IL IN MI NH NJ OH ON PA PQ | 1, 2, 3, 5 |
| *Vanonus piceus* (LeConte) | D. S. Sikes 1998 [c15] | c15, p59e | 1201 | RI MA DC MD NH NY ON PA WI | 1, 2, 3, 5 |
| *Zonantes fasciatus* (Melsheimer) | D. S. Sikes 1995 [c15] | c15, p59e, p79e, c13 | 1200 | RI CT MA DE IL IN MD ME MI NH NJ NY OH PA PQ WI | 1, 2, 3 |

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**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| **Scraptiidae [ 4 / 2 ]** | | | | | |
| *Canifa pallipes* (Melsheimer) | D. S. Sikes 1998 [c15] | c15, c13 | 1152 | RI IN ME MI | 1, 2 |
| *C. pusilla* (Haldeman) * | unknown | c13 | 1152 | RI IN NY WI | 1, 2 |
| **Cerambycidae [ 123 / 44 ]** | | | | | |
| *Arhopalus rusticus obsoletus* (Randall) | unknown | p6e, p79e, c37 | 1208 | RI CT MA IL ME MI NH NY OH ON PA | 1, 2, 5 |
| *Asemum australe* LeConte | D. S. Sikes 2000 [c15] | c15 | 1208 | RI MA NY | 1, 2 |
| *Atimia confusa* (Say) | unknown | p6e, c13 | 1207 | RI IN MD ME MI NH NJ NY OH PQ | 1, 2, 3, 5 |
| *Acmaeops discoideus* (Haldeman) | D. S. Sikes 2001 [c20] | p6e, c20 | 1243 | RI ME MI NH NY OH ON PA VT | 1 |
| *Anthophylax cyaneus* (Haldeman) | D. S. Sikes 2000 [c15] | c15, c3e | 1241 | RI MA ME MI NH NS NY OH ON PA PQ | 1, 2 |
| *Brachyleptura champlaini* Casey * | D. S. Sikes 1998 [c15] | p6e, c15, c13 | 1253 | RI NY PA | 1, 2 |
| *B. circumdata* (Olivier) | D. S. Sikes 1997 [c15] | p6e, c15, c13, c37 | 1252 | RI MA IN NJ OH PA | 1, 2 |
| *Brachysomida bivittata* (Say) * | Knull 1949 [c37] | p6e, c37 | 1243 | RI IN MD MI NY OH ON PA PQ | 1, 2, 5 |
| *Gaurotes thoracica* (Haldeman) | W.L. Krinsky 2001 [c13] | c13 | 1242 | RI MA PA | 1 |
| *Grammoptera haematites* (Newman) | D. S. Sikes 1998 [c15] | p6e, c15, p79e, c13 | 1246 | RI MA IL IN NY OH ON PA PQ | 1, 2, 5 |
| *G. subargentata* (Kirby) | unknown | c13 | 1246 | RI MA IN ME NB NF NH NY OH PQ | 1, 2, 3, 4, 5 |
| *Neoalosterna capitata* (Newman) * | D. S. Sikes 1997 [c15] | p6e, c15 | 1248 | RI IN MI NY OH ON PQ | 1, 2, 5 |
| *Stictoleptura canadensis* (Olivier) | Knull 1947 [c37] | p6e, c37 | 1251 | RI MA MI NB NF NH NJ NS NY OH ON PA PQ VT | 1, 5 |
| *Strangalia acuminata* (Olivier) | D. S. Sikes 1997 [c15] | p6e, c15, c13, c20, c37 | 1244 | RI MA IN MD NY OH ON PA | 1, 2 |
| *S. bicolor* (Swederus) * | unknown | c13 | 1244 | RI IN NJ NY OH PA | 1, 2, 5 |
| *Trigonarthris proxima* (Say) | unknown | p6e, c20 | 1252 | RI IN NH NY OH ON PA PQ | 1, 5 |
| *Typocerus acuticauda* Casey | D. S. Sikes 1998 [c15] | c15, c3e, p79e, c20 | 1248 | RI CT MA IN NS OH ON PA | 1, 2 |
| *T. lugubris* (Say) * | D. S. Sikes 1997 [c15] | p6e, c15 | 1248 | RI IL IN OH ON | 1, 2, 5 |
| *Anelaphus parallelus* (Newman) | D. S. Sikes 1998 [c15] | c15, c13 | 1216 | RI MA IL IN MD MI NJ NY OH ON PA PQ | 1, 2, 3, 5 |
| *Callidium frigidum* Casey | unknown | p6e, p79e, c20 | 1222 | RI MA NY PQ | 1, 2, 5 |
| *C. violaceum* (Linnaeus) * | D. S. Sikes 2001 [c20] | c3e, c13, c20 | 1222 | RI NY OH ON PA PQ | 1 |
| *Clytus ruricola* (Olivier) | D. S. Sikes 1997 [c15] | p6e, c15, c13, c20, c37 | 1231 | RI MA IL IN ME MI NH NS NY OH ON PA PQ | 1, 2, 5 |
| *Elaphidion mucronatum* (Say) * | unknown | c13, c37 | 1217 | RI IL IN MD MI NJ NY OH PA | 1, 2, 3, 5 |
| *Elytroleptus floridanus* (LeConte) | W.L. Krinsky 2001 [c13] | c13, c20 | 1236 | RI MA MD ME NJ NY OH PQ | 1, 2 |
| *Gracilia minuta* (Fabricius) * | Knull 1947 [c37] | p6e, c37 | 1212 | RI IN NY OH ON PA | 1, 2 |
| *Hesperophanes pubescens* (Haldeman) | D. S. Sikes 1997 [c15] | p6e, c15, p79e | 1213 | RI CT MA IN MI NY OH PA WI | 1, 2, 5 |
| *Megacyllene caryae* Gahan * | W.L. Krinsky 1999 [c13] | c3e, c13, c3e7 | 1226 | RI IN MD MI NY OH ON PA PQ | 1, 2, 3, 6 |
| *Obrium maculatum* (Olivier) * | unknown | c13 | 1218 | RI IN NY OH PA | 1, 2, 3, 6 |
| *Physocnemum brevilineum* (Say) | unknown | c13 | 1225 | RI CT IN MD ME MI NH NJ NY OH ON PA PQ | 1, 2, 3, 5 |
| *Stenosphenus notatus* (Olivier) | unknown | c13 | 1215 | RI MA IL IN MD NJ NY OH ON PA PQ | 1, 2, 3 ,5 |
| *Tilloclytus geminatus* (Haldeman) | D. S. Sikes 2000 [c15] | p6e, c15, c37 | 1232 | RI IN MD NY OH ON PA | 1, 2 |
| *Xylotrechus sagittatus* (Germar) | D. S. Sikes 1998 [c15] | c15 | 1228 | RI MA MD ME MI NJ NY OH ON PA PQ | 1, 2, 3, 5 |

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**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| *Astylopsis sexguttata* (Say) | unknown | c13 | 1266 | RI MA MD NY OH ON | 1, 2, 3, 5 |
| *Hyperplatys aspersa* (Say) | D. S. Sikes 1997 [c15] | p6e, c15, p79e | 1266 | RI CT MA IN MD NJ NY OH ON PA PQ WI | 1, 2, 3, 5 |
| *Lepturges symmetricus* (Haldeman) * | unknown | c13, c20 | 1267 | RI IN NY OH ON WI | 1, 5 |
| *Liopinus punctatus* (Harold) * | unknown | c13 | 1268 | RI IL IN MD NJ OH PA | 1, 2, 3, 5 |
| *Urgleptes facetus* (Say) * | unknown | c13 | 1270 | RI IN MD NJ NY OH ON PA | 1, 2, 5 |
| *U. querci* (Fitch) * | D. S. Sikes 2000 [c15] | c15, c13, c20 | 1270 | RI MD MI NY OH ON PA WI | 1, 2, 5 |
| *U. signatus* (LeConte) | D. S. Sikes 1998 [c15] | c15, p79e, c13, c37 | 1270 | RI CT MA IL IN MD MI NY OH ON PA | 1, 2, 5 |
| *Monochamus carolinensis* Olivier | Knull 1947 [c37] | p6e, c13, c20, c37 | 1256 | RI MA IN ME MI NJ NY OH ON PA PQ WI | 1, 2, 3, 5 |
| *Oberea gracilis* (Fabricius) | unknown | p6e, c37 | 1275 | RI MA MD NY OH PA | 1, 2 |
| *O. myops* Haldeman * | D. S. Sikes 1997 [c15] | p6e, c15 | 1276 | RI IL IN MD MI NY OH ON PA WI | 1, 2, 5 |
| *Ecyrus dasycerus* (Say) | D. S. Sikes 1997 [c15] | p6e, c15, p79e | 1260 | RI CT MA IL IN MD MI NJ NY OH PA | 1, 2, 3, 5 |
| *Pogonocherus parvulus* LeConte | D. S. Sikes 1997 [c15] | p6e, c15, p79e | 1260 | RI MA MI NJ OH ON PQ | 1, 3, 5 |
| **Megalopodidae [ 3 / 2 ]** | | | | | |
| *Zeugophora consanguinea* Crotch | unknown | c13 | 1299 | RI CT IL IN NY PA | 1 |
| *Z. puberula* Crotch | unknown | c13 | 1299 | RI MA IL IN | 1 |
| **Bruchidae [ 7 / 2 ]** | | | | | |
| *Amblycerus robiniae* (Fabricius) * | D. S. Sikes 1995 [c15] | c15 | 1404 | RI IN MD NY ON PA | 1, 2 |
| *Acanthoscelides longistilus* (Horn) | unknown | c13 | 1408 | RI MA IN | 1, 2 |
| **Chrysomelidae** [ 194 / 43 ] | | | | | |
| *Donacia megacornis* Blatchley | S. M. Clark 1998 [c15] | c15 | 1297 | RI MA IN MI NH NJ NY ON | 1, 5 |
| *Oulema melanopus* (Linnaeus) | S. M. Clark 1998 [c15] | c15 | 1303 | RI IL IN MD NJ NY H ON PA PQ WI | 1, 2, 5 |
| *Cassida rubiginosa* O. F. Müller * | S. M. Clark 1998 [c15] | c15 | 1399 | RI IN MI NY | 1 |
| *Charidotella purpurata* (Boheman) * | unknown | c13 | 1400 | RI IN MD NY ON PA | 1, 2 |
| *Chalepus bicolor* (Olivier) * | S. M. Clark 1998 [c15] | c15 | 1394 | RI IN MD NY OH | 1, 2, 3, 5 |
| *C. walshii* (Crotch) | S. M. Clark 1998 [c15] | c15, c13 | 1394 | RI MA IL NH | 1 |
| *Sumitrosis inaequalis* (Weber) | S. M. Clark 1998 [c15] | c15, p79e, c13 | 1393 | RI CT MA IL IN MD MI NH NJ NY ON PA PQ | 1, 2, 3, 4, 5 |
| *Calligrapha amelia* Knab * | D. Furth 1986 [c13] | c13 | 1339 | RI NY OH | 1, 2 |
| *C. rhoda* Knab | D. Furth 1986 [c13] | p79e, c13, c20 | 1340 | RI MA MD NH WI | 1, 5 |
| *C. spiraeae* (Say) | unknown | c37 | 1339 | RI CT ME MI OH PA | 1 |
| *Chrysolina quadrigemina* (Suffrian) * | S. M. Clark 1998 [c15] | c15 | na | | |
| *Chrysomela lineatopunctata* (Forster) | S. M. Clark 1998 [c15] | c15 | 1342 | RI MA IL ME MI NH NJ NY OH ON PQ VT WI | 1, 4, 5 |
| *Phaedon viridis* Melsheimer | unknown | p79e, c13 | 1343 | RI CT MA DC IL ME NB NH NJ NY OH ON PA PQ VT | 1, 2, 3, 5 |
| *Plagiodera versicolora* (Laicharding) | S. M. Clark 1998 [c15] | c15 | 1344 | RI IN ME MI NJ NY OH | 1 |
| *Prasocuris phellandrii* (Linnaeus) | C. Brivio [c13] | c13 | 1345 | RI IN NY OH ON PQ | 1, 4, 5 |
| *Altica litigata* Fall * | S. M. Clark 1998 [c15] | c15 | 1373 | RI IN NY | 1, 2, 3 |

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**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| *A. ulmi* Woods * | unknown | c20 | 1373 | RI NY OH | 1, 2 |
| *Capraita scalaris* (Melsheimer) | S. M. Clark 1998 [c15] | c15 | 1388 | RI MA IN MI NY OH PA | 1, 2, 3, 5 |
| *C. sexmaculata* (Illiger) | S. M. Clark 1998 [c15] | c15, p79e | 1388 | RI CT MA IL IN MD MI NJ NY OH PA | 1, 2, 3, 5 |
| *Crepidodera nana* (Say) | D. S. Sikes 2000 [c15] | c15, c13 | 1378 | RI IL IN MD ME MI NY ON PA PQ WI | 1, 2, 3, 4, 5 |
| *Disonycha pensylvanica* (Illiger) | unknown | p79e, c20 | 1370 | RI MA IL IN MD ME NJ NY OH | 1, 2, 3 |
| *Mantura chrysanthemi* (Koch) | S. M. Clark 1998 [c15] | c15, c13 | 1381 | RI MA IN NY OH | 1, 2, 3, 4, 5 |
| *Phyllotreta chalybeipennis* (Crotch) | S. M. Clark 1998 [c15] | c15 | 1362 | RI MA NJ NY | 1, 2 |
| *P. cruciferae* (Goeze) * | S. M. Clark 1998 [c15] | c15 | na | | |
| *Psylliodes affinis* (Paykull) | S. M. Clark 1998 [c15] | c15 | 1391 | RI MD ME MI NY PA | 1 |
| *Erynephala maritima* (LeConte) * | W.L. Krinsky 1999 [c13] | c13, c37 | 1352 | RI NS NY | 1, 2, 3 |
| *Ophraella notulata* (Fabricius) * | S. M. Clark 1998 [c15] | c15, c20, c37 | 1354 | RI IN MI NJ NY | 1, 2, 3, 6 |
| *Tricholochmaea kalmiae* (Fall) | S. M. Clark 1998 [c15] | c15 | 1352 | RI MA ME NJ NY PQ | 1 |
| *T. vaccinii* (Fall) | S. M. Clark 1998 [c15] | c15 | 1352 | RI MA MD ME PQ | 1 |
| *Exema canadensis* Pierce | unknown | c13 | 1323 | RI MA IL IN MD ME MI NB NH NJ NY OH ON PQ VT WI | 1, 2, 3, 5 |
| *E. dispar* Lacordaire | unknown | p79e, c20 | 1323 | RI CT IL IN MD MI NJ NY OH ON PA WI | 1, 2, 3, 5 |
| *Neochlamisus comptoniae* (Brown) | S. M. Clark 1998 [c15] | c15, p79e, c13 | 1322 | RI CT MA ME MI NH NY PA | 1, 5 |
| *N. cribripennis* (LeConte) | unknown | p79e, c13, c20 | 1322 | RI MA IN MI ON PQ WI | 1, 5 |
| *Cryptocephalus incertus* Olivier | unknown | p74e, c13 | 1308 | RI MA MD NH NJ NY | 1, 2 |
| *Diachus auratus* (Fabricius) | S. M. Clark 1998 [c15] | c15, c13 | 1312 | RI CT IN NY OH | 1, 2, 3, 4, 5 |
| *D. catarius* (Suffrian) * | C. Brivio [c13] | c13 | 1312 | RI IL NY ON PQ | 1, 2 |
| *Pachybrachis m-nigrum* (Melsheimer) | unknown | c13 | 1318 | RI MA IL IN MD NH NJ NY OH PA | 1, 2, 5 |
| *P. spumarius* Suffrian | unknown | c13 | 1319 | RI MA IL IN MD NJ NY OH | 1, 2, 3, 5 |
| *P. tridens* (Melsheimer) | unknown | c13 | 1319 | RI CT IL IN MI NJ NY OH PA | 1, 2, 3, 5 |
| *P. trinotatus* (Melsheimer) * | unknown | c37 | 1319 | RI IN MD MI NJ NY OH ON PA | 1, 2, 3 |
| *Tymnes metasternalis* (Crotch) * | D. S. Sikes 2001 [c20] | c20 | 1326 | RI IL IN NY OH PA | 1, 2, 3 |
| *Paria thoracica* (Melsheimer) | unknown | c13 | 1330 | RI MA IL IN NY OH ON PA | 1, 2, 3, 5 |
| *Syneta ferruginea* (Germar) | unknown | c13, c37 | 1300 | RI MA IN NF NJ NY OH PA | 1, 2, 5 |
| **Nemonychidae [ 2 / 2 ]** | | | | | |
| *Cimberis elongatus* (LeConte) | D. S. Sikes 2001 [c20] | p19e, p79e, c13, c20, p44e | 1466 | RI CT MA MD ME MI NH NJ NY OH ON PA PQ WI | 1, 2, 4, 5 |
| *C. pilosa* (LeConte) | unknown | p19e, c13 | 1466 | RI MA MD ME NH NJ NY OH ON PA | 1, 2, 5 |
| **Anthribidae [ 8 / 5 ]** | | | | | |
| *Trigonorhinus tomentosus* (Say) * | unknown | c37 | 1417 | RI DC DE IN MI NJ NY OH ON PA PQ | 1, 2, 3, 4, 6 |
| *Ormiscus saltator* (LeConte) | unknown | p79e, c13 | 1418 | RI CT MA IL IN MI NJ NY OH PA | 1, 2, 3, 5 |
| *Eusphyrus walshii* LeConte | unknown | c13 | 1418 | RI DC IL IN ME MI NJ NY OH | 1, 2, 3, 5 |
| *Allandrus bifasciatus* LeConte | unknown | c13 | 1416 | RI MA IL IN MI NY OH ON PA PQ WI | 1, 2, 5 |
| *Eurymycter fasciatus* (Olivier) * | unknown | c13 | 1416 | RI DC MD MI NY ON PA PQ | 1, 2, 3, 4, 5 |
| **Attelabidae [ 12 / 1 ]** | | | | | |
| *Auletobius cassandrae* (LeConte) | R.S.Anderson 1996 [c15] | c15, p79e, c13, p44 | 1464 | RI IL ME MI NH NJ NS NY PA PQ WI | 1, 2, 3 |

*.....continued on the next page*

**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| **Brentidae [ 11 / 3 ]** | | | | | |
| *Coelocephalpion decoloratum* (Smith) | unknown | c13 | 1473 | RI MA DC MD MI NJ NY PA | 1, 2, 3, 5, 6 |
| *Trichapion nigrum* (Herbst) | unknown | c13 | 1476 | RI MA DC IL IN MD NH NJ NY OH PA VT WI | 1, 2, 5 |
| *Trichapion porcatum* (Boheman) | unknown | c37 | 1476 | RI MA DC IL IN MD NH NJ NY OH PA VT | 1, 2, 5 |
| **Curculionidae [ 211 / 79 ]** | | | | | |
| *Sphenophorus marinus* Chittenden * | unknown | c13 | 1643 | RI NJ | 1, 2 |
| *S. minimus* Hart | R.S.Anderson 2000 [c15] | c15 | 1642 | RI CT IL IN MI NJ NY OH ON PA | 1, 2, 3, 5 |
| *S. zeae* Walsh | R.S.Anderson 1996 [c15] | c15, p79e, p44 | 1642 | RI CT MA IL IN MI NH NJ NY OH ON PA | 1, 2, 3, 5 |
| *Lissorhoptrus simplex* (Say) * | unknown | c13 | 1537 | RI IN MD | 1, 2, 3, 5 |
| *Onychylis longulus* LeConte | R.S.Anderson 1996 [c15] | c15, p79e | 1539 | RI CT MI | 1, 2, 3, 5 |
| *O. nigrirostris* (Boheman) | R.S.Anderson 2000 [c15] | c15, p79e, p44e | 1539 | RI CT MA DC IL IN MI NH NJ NY ON PA WI | 1, 2, 3, 5 |
| *Anthonomus decipiens* LeConte * | R.S.Anderson 2000 [c15] | c15 | 1557 | RI IN MI | 1, 3, 5 |
| *A. elongatus* LeConte | R.S.Anderson 1996 [c15] | c15, p79e, p44e | 1557 | RI CT MA DC IL IN MD MI NH NJ NY OH ON PA PQ WI | 1, 2, 3, 5 |
| *A. nigrinus* Boheman | unknown | c13 | 1556 | RI CT DC IL IN MI NJ NY PQ | 1, 2, 3, 5 |
| *Curculio caryae* Horn | unknown | c13, c37 | 1547 | RI CT DC DE IL IN MD NJ NY OH ON PA PQ WI | 1, 2, 3, 5 |
| *C. humeralis* (Casey) | unknown | c13 | 1545 | RI IN NJ PA | 1, 2, 3, 5, 6 |
| *Dorytomus parvicollus* (Casey) | unknown | c13 | 1524 | RI IN ME MI NY ON PA PQ VT WI | 1, 3, 4, 5 |
| *D. vagenotatus* Casey | unknown | p79e, c13, p44e | 1525 | RI CT MA IN MD ME NH NJ NY OH ON PA PQ WI | 1, 3, 4, 5 |
| *Mecinus pyraster* (Herbst) * | R.S.Anderson 2000 [c15] | c15 | 1569 | RI MD NJ NY | 1, 2, 4 |
| *Myrmex myrmex* (Herbst) | R.S.Anderson 1996 [c15] | c15, p79e, c13 | 1541 | RI CT DC IN MD NJ NY OH PA PQ | 1, 2, 3, 5 |
| *Lignyodes helvolus* (LeConte) | unknown | p79e, c13, p44e | 1566 | RI CT MA DC IL IN MD MI NJ NY OH ON PA PQ WI | 1, 2, 3, 5, 6 |
| *Tychius picirostris* (Fabricius) | R.S.Anderson 1996 [c15] | c15, p79e, c13, p44e | 1567 | RI CT MA DC IL IN MD ME MI NY OH ON PA PQ VT | 1, 2, 3, 4, 5 |
| *Bagous cavifrons* LeConte | R.S.Anderson 2000 [c15] | c15 | 1535 | RI MA IL MI NJ WI | 1, 2, 5 |
| *B. restrictus* LeConte * | R.S.Anderson 2000 [c15] | c15 | 1535 | RI IL IN MD NY OH PQ WI | 1, 2, 3, 4, 5 |
| *Baris aerea* (Boheman) | R.S.Anderson 2000 [c15] | c15, p79e | 1616 | RI CT IL IN NJ NY OH | 1, 2, 3, 5 |
| *Dirabius calvus* (LeConte) * | unknown | c13 | 1631 | RI DC NJ NY OH PA | 1, 2 |
| *Geraeus penicillus* (Herbst) * | unknown | c13 | 1624 | RI DC IN NJ NY OH | 1, 2, 3, 5, 6, 7 |
| *Glosianus punctiger* (Gyllenhal) | R.S.Anderson 1996 [c15] | c15, p79e | 1602 | RI CT MA IL IN MD MI NB NF NJ NY OH ON PA WI | 1, 2, 4, 5 |
| *Pelenomus sulcicollis* (Fåhraeus) | unknown | c13 | 1609 | RI CT DC IL IN MI NJ NY ON PA PQ VT WI | 1, 2, 5 |
| *Acoptus suturalis* LeConte | unknown | c13 | 1592 | RI CT IL IN MD MI NJ NY OH ON PA PQ | 1, 2, 5, 6 |
| *Lechriops oculata* (Say) | R.S.Anderson 1996 [c15] | c15, p79e, c13 | 1591 | RI CT DC IN MD MI NJ NY OH ON PA PQ | 1, 2, 3, 5, 6 |
| *Psomus armatus* (Dietz) * | unknown | c13 | 1592 | RI IL IN MD NJ NY OH ON PA PQ | 1, 2 |
| *Cossonus platalea* Say | unknown | p79e, c20 | 1649 | RI CT IN MI NJ NY PA PQ | 1, 2 |

*.....continued on the next page*

  

**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| *Mesites subcylindricus* (Horn) * | R.S.Anderson 2000 [c15] | c15 | 1651 | RI CT MA DE NJ NY | 1, 2 |
| *Stenoscelis brevis* (Boheman) | unknown | p79e | 1653 | RI CT MA IN MI NH NJ NY OH ON PA PQ VT WI | 1, 2, 5 |
| *Acalles carinatus* LeConte * | R.S.Anderson 1996 [c15] | c15 | 1582 | RI DC IL IN MI NJ NY OH | 1, 2, 5 |
| *Apteromechus ferratus* (Say) | R.S.Anderson 2000 [c15] | c15 | 1588 | RI CT DC IL IN MD MI NJ NY OH PA | 1, 2, 5 |
| *Cryptorhynchus minutissimus* LeConte * | unknown | c13 | 1588 | RI DC IN MD NJ OH PA | 1, 2 |
| *Eubulus bisignatus* (Say) * | unknown | c20 | na | RI DC IN MD MI NJ OH ON | |
| *Tyloderma punctatum* Casey | unknown | c13, c20 | 1586 | RI CT DC IN MD NJ NY OH | 1, 2, 3, 5 |
| *Cophes obtentus* (Herbst) | unknown | c13 | 1589 | RI CT DC IL IN MD NJ NY PA | 1, 2, 3, 6 |
| *Listronotus appendiculatus* (Boheman) | unknown | p79e, c13, c20, p44e | 1503 | RI CT MA IL IN MD ME MI NH NJ NY OH ON PA PQ WI | 1, 2, 3, 4, 5 |
| *L. caudatus* (Say) | unknown | p79e, c13, p44 | 1501 | RI CT MA DC IL IN MD MI NJ NY OH ON PA PQ WI | 1, 2, 3, 4, 5 |
| *L. porcellus* (Say) | unknown | c13 | 1505 | RI CT DC IL IN ME | 1, 2, 3, 4, 5 |
| *L. sordidus* (Gyllenhal) * | unknown | c13, p44e | na | | |
| *Calomycterus setarius* Roelofs | R.S.Anderson 2000 [c15] | c15, p79e, c37, p44e | 1499 | RI CT MA DC IL IN MD MI NY OH PA WI | 1, 2, 5 |
| *Cyrtepistomus castaneus* (Roelofs) | R.S.Anderson 2000 [c15] | c15, p79e | 1498 | RI CT DC IN MD NJ NY OH PA | 1, 2, 3, 5 |
| *Barynotus schoenherri* (Zetterstedt) | unknown | c13, c20 | 1484 | RI MA ME NB NF NS NY PQ | 1 |
| *Aphrastus griseus* Blatchley * | unknown | c13 | 1495 | RI IN | 1, 2 |
| *Phyllobius oblongus* (Linnaeus) | R.S.Anderson 2000 [c15] | c15, p79e | 1494 | RI CT IN MI NB NY OH | 1, 4 |
| *Pachyrhinus elegans* (Couper) | unknown | p79e, c13, p44e | 1485 | RI CT MA IN NH NY ON PA PQ | 1, 3, 4, 5 |
| *Polydrusus sericeus* (Schaller) | R.S.Anderson 1996 [c15] | c15, p79e, p44e | 1484 | RI CT MA IL IN MI NY OH PQ | 1 |
| *Sciaphilus asperatus* (Bonsdorff) | R.S.Anderson 1996 [c15] | c15, p79e, c13, p44e | 1485 | RI CT MA IN MD ME NH NJ NS NY ON PQ VT WI | 1, 2, 4, 5 |
| *Sitona cylindricollis* Fåhraeus | R.S.Anderson 2000 [c15] | c15, p71, p79e | 1487 | RI CT MA IL IN MI NY OH ON PQ VT WI | 1, 2, 3, 4, 5 |
| *Cercopeus chrysorrhoeus* (Say) | unknown | c13 | 1493 | RI MA DC IN MD MI NJ NY OH PA | 1, 2, 3 |
| *Pseudocneorhinus bifasciatius* (Roelofs) | R.S.Anderson 2000 [c15] | c15, p79e | 1499 | RI CT DC IL IN MD NJ NY PA | 1, 2 |
| *Hypera meles* (Fabricius) | unknown | p79e, c13, p44e | 1509 | RI CT MA NH NJ NY ON PA PQ | 1, 2, 5 |
| *Lixus terminalis* LeConte | unknown | p79e, c37, p44e | 1515 | RI CT MA DC IL IN MD MI NJ NY OH ON PA WI | 1, 2, 3, 4, 5 |
| *Laemosaccus nephele* (Herbst) | unknown | p79e, c13, p44e | 1544 | RI CT MA DC IN NJ NY OH PA | 1, 2, 3, 5, 6 |
| *Magdalis alutacea* LeConte | R.S.Anderson 2000 [c15] | c15 | 1543 | RI ME MI NH NY ON PQ | 1, 3, 4, 5 |
| *M. armicollis* (Say) | unknown | c13, c20 | 1543 | RI CT IL IN MI NJ NY OH ON PA | 1, 2, 3, 5 |
| *M. austera* Fall | R.S.Anderson 2000 [c15] | c15, c13, c20 | 1543 | RI MA IN ME MI NH NY ON | 1, 2 |
| *M. pandura* (Say) | unknown | c13 | 1544 | RI MA IL IN MI NJ NY OH ON PA PQ WI | 1, 2, 3, 5 |
| *M. salicis* Horn | unknown | c13 | 1544 | RI MA IN ME MI NY | 1 |
| *Rhyssomatus aequalis* Horn | R.S.Anderson 2000 [c15] | c15 | 1572 | RI CT DC IL IN MD OH PA | 1, 2, 5 |
| *R. lineaticollis* (Say) | R.S.Anderson 1996 [c15] | c15, p79e, c13, c20, p44 | 1572 | RI CT MA DC IL IN MI NJ NY PA WI | 1, 2, 3, 4, 5 |
| *Conotrachelus albicinctus* LeConte | unknown | p79e, c13, p44e | 1574 | RI CT MA DC IL IN MI | 1, 2, 3, 5 |
| *C. anaglypticus* (Say) | R.S.Anderson 2000 [c15] | c15, p79e, c20, c37, p44e | 1578 | RI CT MA DC DE IL IN MD ME MI NJ NY OH ON PA WI | 1, 2, 3, 5, 6, 7 |

*.....continued on the next page*

  

**TABLE 1** (continued)

| Species | Determiner | Vouchers | Page | Distribution in N.E. NA | Continental |
|---|---|---|---|---|---|
| *C. elegans* (Say) | R.S.Anderson 2000 [c15] | c15, p79e, c13, p44e | 1576 | RI CT MA DC IL IN MD MI NH NJ NY OH ON PA VT | 1, 2, 3, 5 |
| *C. naso* LeConte | unknown | c13 | 1577 | RI CT DC IL IN MD MI NY PA | 1, 2, 3, 5 |
| *C. seniculus* LeConte * | unknown | c13 | 1575 | RI DC DE IL IN MD MI NJ NY OH PA PQ | 1, 2, 3, 5, 6 |
| *Chramesus hicoriae* LeConte | unknown | p79e, c13 | 1433 | RI CT MA DC DE IL IN MD NJ NY OH ON PQ VT WI | 1, 2, 3, 5 |
| *Dendroctonus valens* LeConte | R. J. Rabaglia 2000 [c15] | c15 | 1431 | RI MA IL IN MI NB NF NH NJ NS NY OH ON PA PQ | 1, 2, 3, 4, 5 |
| *Dryocoetes granicollis* (LeConte) * | R. J. Rabaglia 2000 [c15] | c15 | 1442 | RI DC IN NB NY OH ON PA PQ | 1, 2 |
| *Gnathotrichus materiarius* (Fitch) | R. J. Rabaglia 2000 [c15] | c15 | 1453 | RI MA DC ME MI NB NJ NS NY OH ON PA PQ VT WI | 1, 2, 3, 5 |
| *Ips grandicollis* (Eichhoff) | unknown | p79e, c13, c37 | 1441 | RI CT MA DC IL IN MD MI NJ NY OH ON PA PQ WI | 1, 2, 3, 5, 6, 7 |
| *I. latidens* (LeConte) | R. J. Rabaglia 2000 [c15] | c15 | 1440 | RI MA NH NY ON PA PQ | 1, 2, 3, 4, 5 |
| *Pityogenes hopkinsi* Swaine | R. J. Rabaglia 2000 [c15] | c15, p79e | 1438 | RI CT MA IL IN ME MI NB NF NH NJ NS NY OH ON PA PQ WI | 1, 2, 5 |
| *Xyleborinus saxeseni* (Ratzeburg) | R. J. Rabaglia 2000 [c15] | c15, p79e | 1448 | RI CT MA DE IL IN MD ME MI NH NJ NY OH ON PA | 1, 2, 3, 4, 5, 6 |
| *Xyleborus celsus* Eichhoff | R. J. Rabaglia 2000 [c15] | c15 | 1447 | RI CT IL IN NJ NY OH PA VT | 1, 2, 3, 5 |
| *X. pelliculosus* Eichhoff * | R. J. Rabaglia 2000 [c15] | c15 | na | | |
| *X. sayi* Hopkins | R. J. Rabaglia 2000 [c15] | c15, p79e | 1446 | RI CT DC IN MD ME MI NJ NY OH ON PA PQ | 1, 2, 3 |
| *Xylosandrus germanus* (Blandford) | R. J. Rabaglia 2000 [c15] | c15 | 1445 | RI CT IL IN NJ NY OH PA | 1, 2 |
| *Xyloterinus politus* (Say) | R. J. Rabaglia 2000 [c15] | c15, p79e | 1444 | RI CT MA DC IL IN MD MI NH NY OH ON PA PQ WI | 1, 2, 5 |

## DISCUSSION

*New State Records*

The 656 new state records for Rhode Island listed in Table 1 include both rare and common species. Of these 656 records, 354 were collected during 1995–2000 and 390 were collected during 1890–1930, with 88 new records shared (*i.e.*, these 88 records were species collected first in 1890–1930 and again in 1995–2000). The 354 records collected during the last five years represent 42% of the 835 species in my collection. I have come to expect that between two-thirds and half of the beetle species sampled in any given collecting trip will be new state records.

*Records not reported from New England by Downie and Arnett (1996)*

I report here that 244 species in Table 1 are not recorded from New England by Downie and Arnett (1996). This would be a surprisingly large number of apparent new records for a region as large as New England. Unfortunately Downie and Arnett (1996) missed many published records. Thus, some of these 244 species are probably recorded from New England and therefore do not represent new records to New England. Twenty

  

of these 244 species are not listed from New England in Downie and Arnett (1996) simply because the species are absent from that work. However, one of the primary objectives of this paper is to update the data contained in Downie and Arnett and so flagging these 244 records was important. The actual number of records in Table 1 new to New England is unknown, but a conservative estimate would indicate that Downie and Arnett missed no more than 50% of the published records, suggesting at least 120 of these records are likely to be new for New England.

Just over half of these 244 records (142) were collected during 1890–1930 with 125 records having been collected during 1995–2000 (with 23 records shared).

*Families*

The following 13 families are herein reported from Rhode Island for the first time: Clambidae, Dryopidae, Heteroceridae, Artematopodidae, Phengodidae, Derodontidae, Nosodendridae, Endecatomidae, Colydiidae, Synchroidae, Stenotrachelidae, Salpingidae, and Nemonychidae (Table 1). With only one exception, these families have very few, usually rarely collected, species in northeastern North America. The exception, the family Heterocidae, is represented in northeastern North America by 21 species (Downie & Arnett 1996), that are not uncommonly encountered (they often come to lights at night). It is a mystery why Davis (1904) and his contemporaries, which include some of the most prolific collectors of that time, missed this family a century ago.

For most families in Table 1, fewer than half of their species are new state records. However, there are some unusual cases in which the majority of the Rhode Island species known for a family are new state records: (ignoring families with fewer than 10 species), such as the Leiodidae (83% new), the Lycidae (80% new), the Melyridae (67% new), and the Mordellidae (71% new).

*Macro-ecological pattern*

This large number of species newly recorded from the state begs the question: is there is a pattern in the distributions of these species? And if so, what would explain the pattern? Are these species primarily from one geographic region? For example, if the majority of these new records are southern species, this might be interpreted as evidence of general warming of the northeastern North American climate.

The values in Table 2 represent counts of species that are known from the regions listed based on the data in Downie and Arnett (1996). Species are not restricted to any particular region, but can occur in multiple regions. Table 2 shows that the majority of the new state records are species that also occur in southeastern North America. Testing these observed values against expected values based on a null hypothesis of equality among the four regions yields a significant rejection of the null ($Chi^2 = 181$, $df=1$, $p < 0.001$). However, it is unlikely that such a null hypothesis is realistic (for reasons explained below). Also, this majority of species with southeastern distributions existed in 1890–1930 as well

  

as today, so this does not appear to indicate a change in climate over the last century. More likely, this pattern exists because the southeastern region is closest to Rhode Island (Fig. 1). This same explanation applies to the rest of the values in Table 2, such that the second greatest 'origin' of these species is from the mid-northern region, which also happens to be the second closest region to Rhode Island (Fig. 1). And not surprisingly, the most distant region, northwestern North America, has the fewest species. Thus a null hypothesis expecting equal numbers of species from each of these four regions is probably unrealistic – the regions differ in their proximity to Rhode Island and they likely differ in the size of their beetle faunas.

**TABLE 2.** Counts of new state records from Rhode Island by collection date and geographic affiliation across North America (Fig. 1). Counts for 1995–2000 do not include species shared with 1890–1930.

| | total | 1890–1930 | 1995–2000 |
|---|---|---|---|
| All regions | 656 | 390 | 266 |
| Southeastern (2)* | 448 | 278 | 170 |
| Southwestern (3) | 268 | 172 | 96 |
| Northwestern (4) | 131 | 78 | 53 |
| Mid-northern (5) | 356 | 224 | 132 |

*Numbers refer to the numbered regions in Figure 1.

Given the coarse scale at which this analysis was conducted it is not surprising that we can draw few conclusions from the results. But even if the locality data for every beetle specimen collected in North America were databased and georeferenced (a Herculean task) the distributions of most groups would probably be too patchy for the fine-scaled analyses required for optimal detection of macro-ecological patterns (Rahbek & Graves 2000).

Looking more closely within the northeastern region itself (Table 3) we can seek a geographic pattern by counting new record species that are documented from states or provinces north, west, or south of Rhode Island within northeastern North America (for this analysis the area east of Rhode Island is considered inconsequential).

The observations in Table 3 also seem to be best explained by area size and proximity to Rhode Island. Within northeastern North America there is more land west of Rhode Island than south (Fig. 1) which might explain the greater number of species from the west. Although there is more land north of Rhode Island than west, the lesser counts for the northern category can be explained by the well documented latitudinal species gradient (Rohde 1992). The explanation being that species richness of most taxa tends to decline with increasing latitude (Rohde 1992) and, thus, the pool of species from which these new

  

records could be derived is smaller. Both Table 2 and Table 3 show essentially the same pattern for the historic data as the modern data which suggests that whatever has caused this pattern has not changed over the last century. In summary, whatever macro-ecological pattern exists appears to be most parsimoniously accounted for by three factors: proximity to Rhode Island, region area, and region species richness.

**TABLE 3.** Counts of new state records from Rhode Island by collection date and geographic affiliation restricted within northeastern North America (Fig. 1). Counts for 1995–2000 do not include species shared with 1890–1930.

| | total | 1890–1930 | 1995–2000 |
|---|---|---|---|
| All regions | 656 | 390 | 266 |
| Northern | 448 | 276 | 172 |
| Western | 562 | 341 | 221 |
| Southern | 334 | 200 | 134 |

*Evidence for Faunal change*

What are the explanations for the rather surprising observation that 30% of the total beetle fauna of Rhode Island had been unrecorded from the state? There are multiple, non-mutually exclusive explanations. These include: (1) the fauna has changed, (2) the fauna is significantly larger than any published samples, and (3) different collecting techniques.

First, recall that the majority of these 656 records were first collected almost a century ago, so the term 'new' should not be confused with 'recently collected.' If all 656 records were recently collected this would be strong evidence that the fauna had changed over the last 100 years. Nevertheless, a sample of 835 species that was recently collected has yielded 266 records not collected in Rhode Island prior to 1995, which is 32% of this sample. Looking at Block Island separately from the mainland we find that 48% of the beetles recently collected on the mainland are new records whereas only 30% of the beetles recently collected on Block Island are new records (Sikes 2002). Thus, almost half of the beetle species recently collected on the mainland are new records. Such a result would be expected if the composition of the fauna had changed. This conclusion is strengthened by the lower percent new from Block Island, because the island may have acted as a buffer against ecological changes occurring on the mainland (Sikes 2002).

Davis (1904) listed 927 species (after removal of synonyms and unassociable names), and my collection has 835 species; these two lists share only 356 species—less than half of the species of either list are on the other. However, if we compare the Davis list to the three large collections made during that time period (1890–1930) we find that 560, 421, and 501 species are shared with each list respectively (average = 494 spp.). These historical collections therefore share on average 53% of their species with the Davis list while

  

the modern sample shares only 38% of its species with the Davis list. This result is predicted by, and therefore supports, a hypothesis of faunal change. During the 1800s most of southern New England was deforested for agricultural purposes but during the mid to late 1900s, as agriculture moved westward, the forests have regenerated to over 70% tree cover (Jorgensen 1978). Given the obvious changes that have occurred to the flora of this state, we should expect similar changes to the fauna.

There have certainly been additions and subtractions to the Rhode Island beetle fauna since 1890–1930. In fact, 73 of 194 non-native species known from Rhode Island are apparently new state records. A few of the post-Davis (1904) introductions to the state include: *Onthophagus taurus, Amphimallon majalis, Nipponoserica peregrina, Popillia japonica, Anomala orientalis* (Scarabaeidae), *Propylae quatuordecimpunctata, Harmonia axyridis* (Coccinellidae), *Lilioceris lilii* (Chrysomelidae)(Anon. 1999), *Myosides seriehispidus,* and *Xyleborus pelliculosus* (Curculionidae). In addition to species that have been added to the fauna since Davis' day, there are over 30 species that have possibly been lost from the state. I have listed these species as of potential conservation concern (Sikes 2002; in press) because they have either gone extinct within the state or are far less common today than historically. Yet, these recently introduced, non-native species only account for 11% of the new state records. So, there are other explanations for these observations that should be entertained.

Collecting species generally results in an asymptotic species-effort curve (*e.g.*, Edwards 1993; Sikes 1994) in which most species, usually the more common, are easily collected with little initial effort, but increasing effort is required to accumulate the rarer species resulting in a plateau effect of diminishing returns. For a non-isolated area like Rhode Island, reaching 100% completeness might require an impractical degree of effort due to frequent immigration and local, temporary extinctions of species. As a result of this pattern, Davis and his collaborators, who published the majority of the records of Rhode Island Coleoptera (Davis 1904), sampled less than 50% of the total fauna. Given the enormity of the total fauna we do not need the fauna to have changed over the last century to expect large quantities of new state records to be found in subsequent inventories. Although these facts do not preclude the hypothesis of faunal change, had Davis published a list that represented 80–95%+ of the total fauna at that time, we would then have a much stronger case for faunal change.

A final explanation, that may account for some of the new state records, is differences in collecting methods between historical and modern collectors. It is unlikely that Victorian era entomologists employed the Berlese funnels and flight intercept traps that are used today, which are among the best methods for collecting smaller beetles (<5mm). However, as an example counter to this argument, Col. Thomas L. Casey Jr. did manage to collect and describe numerous Rhode Island species of micro-Coleoptera such as corylophids, ptiliids, scydmaenids, pselaphine, and aleocharine staphylinids, which indicates that the collecting methods of that era successfully captured the smaller Coleoptera. Thus, differ-

  

ences in collecting methods should account for few if any of the new state records. Therefore this large percentage of new records is most likely attributable to a combination of both faunal change and small prior published samples relative to the size of the complete fauna.

## Conclusions

For Rhode Island the species richness of Coleoptera is comparable to that of the vascular plants, of which 1,980 species are listed from Rhode Island (Gould *et al*. 1998). However, although the species richness is comparable, the status of our knowledge of these two groups is vastly different. Is there any state in the United States in which a botanist could acquire 354 new state records by collecting the first 835 plant species encountered? Vast ignorance of local biodiversity, especially for hyperdiverse groups such as the holometabolous insects, is probably typical for most states. Blatchley (1938) listed almost 2,000 beetle species from the state of Florida, but only 60 years later Peck and Thomas (1998) published an updated list that more than doubled Blatchley's count (4,675 species). Unfortunately, such modern efforts to update old checklists of hyperdiverse taxa are usually more than simple supplements. Rather than adding a few new records to an almost complete list, as is the norm for vertebrate and plant checklists, we find ourselves documenting faunas that are, at best, poorly known. This can be a mixed blessing. On the one hand it allows naturalists a sense of exploration within their own backyards usually only experienced in tropical ecosystems. But on the other, it decries our ignorance and raises questions regarding the value we place on our local, natural heritage.

## Acknowledgments

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## Appendix

**Voucher Sources.** The 83 voucher sources on which the Rhode Island Coleoptera checklist is based are listed below. They are listed numerically according to their voucher code. (code prefixes: p=publication, c=collection, u=unpublished database or checklist).

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