

# The Great Lakes Entomologist

---

Volume 45  
Numbers 3 & 4 - Fall/Winter 2012 *Numbers 3 &  
4 - Fall/Winter 2012*

---

Article 9

October 2012

## Annotated Checklist of the Pentatomidae (Heteroptera) of Connecticut

Jane E. O'Donnell  
*University of Connecticut*

Carl W. Schaefer  
*University of Connecticut*

Follow this and additional works at: <https://scholar.valpo.edu/tgle>



Part of the [Entomology Commons](#)

---

### Recommended Citation

O'Donnell, Jane E. and Schaefer, Carl W. 2012. "Annotated Checklist of the Pentatomidae (Heteroptera) of Connecticut," *The Great Lakes Entomologist*, vol 45 (2)  
Available at: <https://scholar.valpo.edu/tgle/vol45/iss2/9>

This Peer-Review Article is brought to you for free and open access by the Department of Biology at ValpoScholar. It has been accepted for inclusion in The Great Lakes Entomologist by an authorized administrator of ValpoScholar. For more information, please contact a ValpoScholar staff member at [scholar@valpo.edu](mailto:scholar@valpo.edu).

## Annotated Checklist of the Pentatomidae (Heteroptera) of Connecticut

Jane E. O'Donnell<sup>1</sup> and Carl W. Schaefer<sup>1</sup>

### Abstract

We provide town data for the Pentatomidae in Connecticut. Although this state has been much collected, most sampling has been limited to only a few locations. Species newly recorded for Connecticut are: *Halyomorpha halys* (Stål), *Hymenarcys nervosa* (Say), *Banasa euchlora* Stål, *B. sordida* (Uhler), and *Perillus bioculatus* (Fabricius). *Podisus neglectus* (Westwood) may occur in the state. Other species found in neighboring states may eventually be found in Connecticut: *Picromerus bidens* (Linnaeus), *Rhacognathus americanus* Stål, *Mcphersonarcys aequalis* (Say), *Thyanta custator custator* (Fabricius), *T. custator acerra* McAtee, and *Amaurochrous brevitylus* (Barber and Sailer). We briefly analyze these data, recognizing some faunal elements. More collecting needs to be conducted in the state, so that distribution patterns outlined here can be more broadly understood, and so that species of potential conservation concern can be identified.

---

Members of the Pentatomidae, or “Stink Bugs,” are ovoid robust insects of moderate to large size. The family is characterized by five-segmented antennae, presence of ocelli, a large transverse pronotum that is much broader than the head, a large prominent scutellum, the membrane of the forewing with numerous veins, tarsi three-segmented, trichobothria present on abdominal sternites four through seven but very small and inconspicuous, and the female genitalia broad and plate-like (Schuh and Slater 1995). Species are often brightly colored, and many exhibit interesting behaviors and ecological interactions. It is no wonder that Jay McPherson found a lifetime of research material studying members of this group. The junior author has known Dr. McPherson from the beginning of time, and has respected him almost from then. We are therefore pleased to offer this contribution in his honor.

The limits of the family Pentatomidae and relationships within the Pentatomoidea are still areas of active research. Some authors treat the Scutellerinae and Acanthosomatinae not as subfamilies of the Pentatomidae but as separate families; this is the taxonomic approach that we take in this treatment, following “The Pentatomoidea Home Page” (Rider 2012). Connecticut’s fauna includes 3 of the remaining 10 pentatomid subfamilies.

The North American fauna was cataloged by Froeschner (1988), who listed approximately 222 species representing 61 genera as occurring north of Mexico. Of these, 79 species in 38 genera occur in northeastern North America (United States and Canada) (McPherson 1982). McPherson (*ibid.*) summarized state treatments. The Connecticut fauna, treated by Parshley (1923) in Britton’s “Hemiptera of Connecticut,” included 27 genera and 45 species. The current list consists of 25 genera (not including 2 likely to occur in Connecticut but not yet reported) and 45 species (not including 4 that might eventually be found in Connecticut). The change in genus number largely reflects taxonomic changes and not distributional ones, with exceptions noted below in the checklist.

---

<sup>1</sup>Department of Ecology and Evolutionary Biology, Unit 3043, University of Connecticut, Storrs, CT 06269-3043.

At the generic level, the Connecticut pentatomid fauna consists of about equal elements derived from the Neotropics, the Nearctic, and the Palearctic (Slater 1974). Within the largest subfamily, the Pentatominae, several endemic Nearctic taxa (*Trichopepla*, *Coenus*, *Hymenarcys*, *Meneclis*, *Dendrocoris*, and *Chlorochroa* (*Rhytidolomia*)) have their closest relatives in the Neotropics (*ibid.*). *Cosmopepla*, *Mormidea*, *Euschistus*, *Thyanta*, *Banasa* and *Murgantia* represent the Neotropical element, with more species in each genus in the Neotropics. Slater (*ibid.*) interpreted *Neottiglossa*, *Holcostethus* and perhaps *Chlorochroa* (*Chlorochroa*) as Palearctic or Holarctic elements, recognizing the difficulty in distinguishing these possibilities. *Brochymena* and the podopine *Amaurochrous* are Nearctic endemics. Of the predaceous Asopinae, *Rhacognathus* and *Picromerus*, are Palearctic; *Podisus*, *Apoecilus* and *Stiretrus* represent Neotropical lineages, whereas *Perillus* is probably Nearctic (*ibid.*). The zoogeographic situation at the specific level is quite different. Most of the Connecticut species of Pentatomidae are strictly or almost entirely Nearctic in distribution. Only 3 species also occur in the Palearctic region and only 6 species extend substantially into the Neotropics, although our knowledge of Neotropical distributions is incomplete (*ibid.*).

### Materials and Methods

We examined over 800 specimens, some more than a century old and some collected as recently as late June 2012, from the following collections: University of Connecticut Entomology Collection (UCMS); the Connecticut Agricultural Experiment Station (CAES); Entomology Division, Peabody Museum, Yale University (YPM); and the personal collections of Chris Maier (CMC) and the junior author (CWS). The few AMNH and NMNH records cited herein were obtained from notebooks of the late James A. Slater, who gave them to the senior author many years ago. Undoubtedly more specimens have been added since he examined these collections, but it was beyond the scope of this project to obtain them. Dan Swanson (UMMZ) provided label information from specimens in the University of Michigan Museum of Zoology in emails to CWS. About half of the specimens were already authoritatively determined to species; we identified the remainder, and attached individual determination labels to each.

The checklist classification at the subfamily and tribal levels follows Rider's (2012) Pentatomoidea Home Page, except as noted, and we also used this site to verify current generic placement of species and spelling of names where possible. An \* preceding the species name indicates that the species may eventually be found in Connecticut, given the proximity of known records as given in Froeschner (1988).

Because we feel it will be quite a while before specimen-level data for all pentatomids are available electronically, we provide town information. Even in a small state like Connecticut, and despite the overwhelming bias of collecting localities, there is some ecological signal apparent in the distribution of stink bugs (see Discussion). Town names were standardized to the 169 names in current use; a town in brackets indicates the official town name (State of Connecticut 2012) where it differs from the name on the label. More complete label data are included for specimens representing what we believe to be the first record for the state.

## Results

### Subfamily Asopinae

*Apoecilus bracteatus* (Fitch); (formerly *Apateticus bracteatus*)

Reported by Parshley (1923) from Litchfield, Prospect, Meriden, New Haven, and Madison; Parshley's record of *A. cynicus* from New Canaan is referred here.

Additional Connecticut records: Durham (CAES).

*Apoecilus cynicus* (Say)

Reported by Parshley (1923) from Durham, Brookfield, Portland, and Meriden; Parshley's New Canaan record is here referred to *A. bracteatus*.

Additional Connecticut records: South Meriden [Meriden] (CAES); Storrs [Mansfield] (UCMS); Westville [New Haven] (YPM).

*Perillus bioculatus* (Fabricius)

Two-spotted Stink Bug. There do not appear to be any previous literature records from Connecticut.

Connecticut records: Mt. Carmel [Hamden], 5 Sept. 1939, R. Beard; Mt. Carmel, Summer 1941, R. Beard; and South Meriden [Meriden], July 9, 1946, H.L. Johnson, Feeding on young Colorado potato beetle larva (all CAES).

*Perillus circumcinctus* Stål

Reported by Parshley (1923) from Colebrook, Meriden, Milford, and Durham; not reported from Connecticut in Froeschner (1988).

Additional Connecticut records: New Haven (CAES).

*Perillus exaptus* (Say)

A northern species, scarce but widespread.

Reported by Parshley (1923) from Thompson, New Haven, Gales Ferry [Ledyard], Seymour, Meriden, Portland, and Wilton.

Additional Connecticut records: West Willington [Willington], Mansfield, Coventry, Newington (UCMS); South Meriden [Meriden], North Stonington, Easton (YPM); Barkhamsted (CAES); Lakeville [Salisbury] (UMMZ). A specimen from East Haddam (CTM) is provisionally identified as this species. This specimen has red markings instead of the strongly contrasting white areas more typical of the species.

*Perillus strigipes* (Herrich-Schaeffer) (formerly *Mineus strigipes*)

Reported by Parshley (1923) from New Canaan.

Additional Connecticut records: Stratford, Shelton (CAES); Storrs [Mansfield], Meriden, Colchester (UCMS); Woodbridge, South Meriden [Meriden], Plantsville [Southington], North Haven, North Branford, Canton, Mt. Carmel [Hamden] (YPM); Stamford (NMNH).

\**Picromerus bidens* (Linnaeus)

Native to, and widespread in, the Palearctic; not yet reported from CT, but known from VT, MA, ME, NH and NY (Froeschner 1988), and west to Ontario in Canada (Wheeler 1999)

We have seen 2 specimens from central NW Massachusetts: Heath, Franklin Co, 10 August 1981 (YPM). This species may eventually be found in CT.

*Podisus brevispinus* Phillips

Note: Authorship of this species is unclear; Phillips (1982) named the species in her dissertation after discovering that the type of *Arma modesta* Dallas was actually a specimen of *P. maculiventris*; she concluded that the species referenced by McPherson and other authors as *P. modestus* did not actually

have a name. Thomas (1992) attributes authorship to Phillips, but Rider (2012), attributes authorship to Thomas.

Reported from Connecticut (as *P. modestus*) by Parshley (1923) from Meriden, Woodstock, Canaan, Kent, Lyme, Norfolk, Farmington, and New Canaan.

Additional Connecticut records (some of these were as *P. modestus*): Cornwall, Branford, Hamden, East Haddam (CAES); Storrs [Mansfield], Mansfield (also CWS), Cornwall, Windsor, Stonington, South Norwalk [Norwalk] (UCMS); North Stonington, Bethany, Mt. Carmel [Hamden], Union, Tunxis [Farmington], Killingworth (YPM); Putnam (AMNH); Lakeville [Salisbury] (UMMZ).

#### *Podisus maculiventris* (Say)

The “Spined Soldier Bug,” is available commercially as a biocontrol agent against a wide array of agriculturally significant pests.

Reported from Connecticut by Parshley (1923) from New Haven, South Glastonbury [Glastonbury], Southington, Cromwell, Windsor, Granby, Branford, Winnipauk [Norwalk], Portland, Meriden, Moosup, Pomfret, New Canaan, and Greenwich.

Additional Connecticut records: Southington, Durham, Madison, Waterbury, Hamden, Stafford, Hartford, Shelton, Norfolk, North Branford (CAES); Canton, Storrs [Mansfield], Mansfield (also CWS), Coventry, Litchfield, Stafford, Gilead [Hebron], Hamden, Wallingford, Groton, West Hartford, East Haddam (UCMS); Hamden, Madison, Waterbury, Shelton, Hartford, Durham, Canton, South Meriden [Meriden], Woodbridge, Short Beach [New Haven], Stonington, No. Plain [East Haddam], North Stonington, Storrs [Mansfield], Thomaston, Guilford (YPM); Wilton, Greenwich, Litchfield (AMNH); Voluntown (CTM); Winchester (CWS); Lakeville [Salisbury] (UMMZ).

#### *Podisus neglectus* (Westwood) (= *Podisus fretus* Olsen, synonymized by Thomas 1992)

We are not aware of any previously published CT records.

Hoffman (1971) considered the distribution “submaritime,” with records along the Atlantic coast from MA to NC; McPherson (1982) included ME, FL and the Great Lakes region of Indiana and Michigan in the range. There is a specimen from Putnam in AMNH. Putnam (Windham County), in eastern CT, which seems to fit the distribution pattern outlined above, but because we did not examine this specimen, we are hesitant to establish a new state record.

#### *Podisus placidus* Uhler

Reported by Parshley (1923) from Stonington, Brookfield, New Haven, Litchfield, Wallingford, Woodbury, Portland, North Stonington, Killingly, Rainbow [Windsor], Lyme, Ansonia, Cornwall, and Middlebury.

Additional Connecticut records: Southington, Milford, Stafford, Hamden, Tolland, Waterbury, South Meriden [Meriden], Oxford, Guilford, Fairfield (CAES); Pachaug [Voluntown], Salisbury, Storrs [Mansfield], Mansfield (also CWS), Norwich, Meriden, Stafford, Bozrah, Willimantic [Windham] (UCMS); South Meriden [Meriden], Bethany, Savin Rock [West Haven], East Hampton, Hamden, Storrs [Mansfield], Salisbury (YPM); Stamford, New Canaan, West Cornwall [Cornwall], Putnam (AMNH); Hamden (CTM); Lakeville [Salisbury] (UMMZ).

#### *Podisus serieiventris* Uhler

Reported by Parshley (1923) from Branford and Woodstock.

Additional Connecticut records: North Branford, Killingly, Middlebury, Orange (CAES);

Willington (UCMS); vicinity Yale Forest, Windham Co. (YPM); East Haddam, Ashford, Barkhamsted (CTM).

*\*Rhacognathus americanus* Stål

Not yet reported from CT, but known from MA, MI, IN, OH, IL, NE, MN, Alberta, and Manitoba (Froeschner 1988). It appears to be a northern species, so its presence in CT may not be all that likely.

*Stiretrus anchorago* (Fabricius)

Reported by Parshley (1923) from Lyme.

Additional Connecticut records: Shelton, Marlborough, South Meriden [Meriden], Westbrook (CAES); South Meriden [Meriden], Storrs and Mansfield Center [Mansfield], Coventry, Windsor, Stonington, Chaplin (UCMS); Mansfield (CWS); Killingworth, New Haven, Guilford, Newtown, Fairfield, Trumbull, North Haven/Wallingford line (YPM); New Canaan, Putnam (as *A. fimbriatus*) (AMNH); Guilford, Meriden, Salisbury (CTM).

### Subfamily Pentatominae

#### Aeliini

*Neottiglossa undata* (Say)

A northern species, ranging from southern Canada and New England west to the Pacific and south to North Carolina.

Reported by Parshley (1923) from North Haven and Middlebury, and by Torre Bueno (1933) from Danbury.

Additional Connecticut records: Canaan, Cromwell and New Haven (CAES); Storrs [Mansfield], Mansfield, New London, East Hartford (UCMS).

#### Cappaeini

*Halyomorpha halys* (Stål)

The now infamous Brown Marmorated Stink Bug, introduced from Asia to Pennsylvania in the late 1990s, made its way to Connecticut in 2008 and is now known from at least 35 towns, and in every CT county (Dr. Chris Maier, CAES, personal communication). A major agricultural pest in the mid-Atlantic states, attacking a wide variety of fruits and vegetables, as well as a nuisance insect when it enters homes to overwinter, *H. halys* may become the same scourge in CT as it is elsewhere.

#### Carpocorini

*Coenus delius* (Say)

Reported by Parshley (1923) from Scotland, New Haven, East Haven, Meriden, Thompson, Yalesville [Wallingford], Stamford, Farmington, Milford, and Marlborough.

Additional Connecticut records: Gilead [Hebron], Bethany, Hamden (CAES); Storrs [Mansfield], Mansfield (also CWS), East Hartland [Hartland], George Seymour State Park [Haddam] (UCMS); Canaan, Guilford (YPM); New Canaan, Canaan, Litchfield, and Manchester (AMNH); Westport, Norwalk

(NMNH).

*Cosmopepla bimaculata* (Thomas)

A common, easily recognized species, widespread in CT.

Here we agree with Froeschner's (1988) interpretation of the nomenclatural tangle involving this species name; Rider (2012) believes the correct name to be *Cosmopepla lintneriana* Kirkaldy.

Reported by Parshley (1923) from Canaan, Thompson, Danbury, Meriden, Norfolk, Salisbury, New Haven, and Cornwall.

Additional Connecticut records: Windham, Amston [Hebron], South Meriden [Meriden], Hartford, Guilford, Milford, Rainbow [Windsor], Berlin, Granby, Litchfield, Manchester, Waterbury, Stafford Springs [Stafford] (CAES); Coventry, Meriden, Plymouth, Darien, Wethersfield, "Mt. Tom State Park" [Morris], Storrs and Mansfield Center [Mansfield], Mansfield (also CWS), Norwich, Stafford, Cheshire, Berlin, Bethlehem, Cromwell, Waterbury, West Hartford, Putnam, Stonington, Norfolk, Poquonock- Farmington River [Windsor], Salisbury (UCMS); Mt. Carmel [Hamden], Washington, Plainville, North Haven, Willimantic [Windham], Hamden, Darien (YPM); New Canaan (AMNH).

*Euschistus ictericus* (Linnaeus)

Reported by Parshley (1923) from New Haven, Branford, and Hamden.

Additional Connecticut records: Durham, South Meriden [Meriden] (CAES); Storrs [Mansfield], Mansfield (also CWS), Meriden, Voluntown, Salisbury, East Killingly [Killingly], Old Saybrook, Wequetequock [Stonington] (UCMS); Salisbury (YPM).

*Euschistus politus* Uhler

Reported by Parshley (1923) from Portland.

Additional Connecticut records: South Meriden [Meriden] (CAES).

*Euschistus servus euschistoides* (Vollenhoven)

A more northern subspecies; large and yellowish brown, similar in color and habitus to *E. variolarius*.

Reported by Parshley (1923) (as *Euschistus euschistoides*) from New Haven, Colebrook, Rockville [Vernon], Scotland, Greenwich, New Canaan, Stamford, Litchfield, Stonington, Meriden, Farmington, Darien, Derby, Milford, Northford [North Branford], Stepney [Monroe], Wilton, Cornwall, Hamden, and Marlborough; not reported from CT in Froeschner (1988).

Additional Connecticut records: Portland, Wilton, Norwalk, Bethany, Waterbury, Prospect, North Guilford [Guilford], Monroe, Middlebury, Stonington, Northford [North Branford] (CAES); Voluntown, Norfolk, West Norfolk [Norfolk], East Killingly [Killingly], Westford [Ashford], Cromwell, Wequetequock [Stonington], Chaplin, Phoenixville [Eastford], Beacon Falls, Union, Hamden, Coventry (UCMS); Mansfield (CWS); Portland, Middlefield, Ansonia, No. Plain [East Haddam], Woodbridge, N. Canaan [New Canaan or North Canaan], N. Haven [North Haven?], Middlefield, Portland, Canaan, Easton, Orange, Mt. Carmel [Hamden], Sharon, Southford [Southbury], South Washington [Washington], Willington, North Ashford [Ashford], Woodbury (YPM); Compo Beach [Westport], Norwalk, Windsor, Stamford, South Meriden [Meriden], Groton Point [Groton], Georgetown [point where Wilton, Weston, Redding, and Ridgefield meet; or not in CT] (NMNH); Westford [Ashford], Granby, Westport (AMNH); Lakeville and Twin Lakes [Salisbury] (UMMZ).



*Euschistus tristigmus* (Say)

Reported by Parshley (1923) from Torrington, Westville [New Haven], New Canaan, East Hartford, Danbury, Manchester, Wallingford, Portland, New Haven, Colebrook, Rainbow [Windsor], Winsted [Winchester], Mystic [Stonington], Kent, Clintonville [North Branford?], and Cornwall; not reported from CT in Froeschner (1988).

Additional Connecticut records: Newtown, Orange, Norwich, Sharon, Killingworth, Goshen, Salisbury, Bethany, South Meriden [Meriden] (CAES); Storrs and Mansfield Center [Mansfield], Mansfield (also CWS), Stratford, Middlefield, Tolland, Litchfield, Cobalt [East Hampton], Meriden, Somers, Stafford, Coventry, Willington, Chaplin (UCMS); East Granby, Marlborough, Granby, Hamden, Plantsville [Southington], Compo Beach [Westport], West Cornwall [Cornwall], South Meriden [Meriden], Canaan (NMNH); Guilford, Canaan, Tolland, Hamden, Meriden, North Branford (CTM); Lakeville [Salisbury], as *E. t. luridus* (UMMZ).

*Euschistus variolarius* (Palisot de Beauvois)

A large, widespread species.

Reported by Parshley (1923) from Mt. Carmel [Hamden], Yalesville [Wallingford], New Haven, Oxford, Greenwich, Norwalk, Scotland, Hartford, New Canaan, West Haven, Westville [New Haven], Mystic [Stonington], Rainbow [Windsor], Portland, Torrington, Hamden and Wilton.

Additional Connecticut Records: Salisbury, Goshen, Stafford, Woodbury, Cornwall, Branford, Windsor, Southington, Monroe, Granby, Hebron, East Hartford, Winchester, Tolland, Montville, Bethany (CAES); Portland, Salisbury, Stratford, Southington, Mansfield (also CWS), Storrs [Mansfield], Tolland, Coventry, Granby, Litchfield, West Willington [Willington] (UCMS); Branford, Savin Rock [West Haven], Woodbridge, Canaan, Ashford, Hartford, N. Haven [North Haven?], Killingworth (YPM); New Britain, Warehouse Point [East Windsor], Suffield, Westport, South Meriden [Meriden] (NMNH).

*Holcostethus limbolarius* (Stål)

Reported by Parshley (1923) from New Haven, East Haven, Hamden, Manchester, Yalesville [Wallingford], Rainbow [Windsor], and Cornwall.

Additional Connecticut Records: New Canaan (CAES); Storrs [Mansfield], Mansfield, Lebanon, Voluntown, Windsor, South Windsor, North Franklin [Franklin], Coventry, West Hartford, Norwich (UCMS); Seymour-Bethany-Woodbridge corner, Darien, Seymour-Woodbridge line (YPM); Meriden, South Meriden [Meriden] (NMNH).

*Hymenarcys nervosa* (Say)

Although known from MA, NY, and RI, it has not, until now, been recorded from CT.

Connecticut record: New London County, Griswold, 1 km SSW junction state route 201 and Edmund Road, 19 July 2006, leg. Chris T. Maier (CTM).

*\*Mepheronarcys aequalis* (Say)

*Mepheronarcys aequalis* was placed in a new genus by Thomas (2012). Seemingly a scarce species, or at least one seldom collected; it has not yet been reported from Connecticut, but is known from MA and NY (Froeschner 1988).



*Menecles insertus* (Say)

Reported by Parshley (1923) from Wallingford, New London, and Stonington.

Additional Connecticut records: Killingworth, Griswold, Kent, Hamden, South Meriden [Meriden], Branford, North Haven, New Haven (CAES); Storrs and Mansfield Center [Mansfield], Mansfield, Hamden, Danbury, Haddam, Coventry, Chaplin, Hampton (UCMS); New Haven, North Stonington, Stratford, Branford, North Ashford [Ashford], Willimantic [Windham], Killingworth, Bethany, No. Plain [East Haddam], Meshomasic State Forest [several towns, Middlesex and Hartford Counties] (YPM); Stamford, South Lyme [Old Lyme] (NMNH); Marlborough, on sticky band around trunk of live American white ash, *Fraxinus americana* L., girdled April 2005 (insect collected August 2005), Orange, East Hampton (CTM).

Note: This is one of 5 species of stink bugs collected in a single UV trap on a particularly sultry late June night in eastern CT (see *Banasa euchlora* for location information).

*Mormidea lugens* (Fabricius)

A common, easily recognized species.

Reported by Parshley (1923) from New Haven, Mt. Carmel [Hamden], Scotland, Torrington, Branford, Danbury, West Haven, Hamden, Darien, Portland, Stonington, Milford, Kent, and North Branford, and by Torre Bueno (1933) from Danbury.

Additional Connecticut Records: Sharon, Shelton, Meriden, Granby, Willington, Killingworth, Marlborough, North Guilford [Guilford], East Hartford, Montville (CAES); East Killingly [Killingly], Salisbury, Phoenixville [Eastford], Voluntown, Union, West Willington [Willington], Norfolk, Wequetequoct [Stonington], Westford [Ashford], Beacon Falls, West Hartford, Cromwell, Old Lyme, Rocky Hill, East Hampton, Guilford, West Norfolk [Norfolk], Plymouth, West Ridgefield [Ridgefield], Stamford, Winsted [Winchester], Windsor, Mansfield Center [Mansfield], Mansfield (also CWS), Willimantic [Windham], Mashamoquet State Park [Pomfret], Wethersfield, West Hartford, Waterford, Hartford, Colebrook, Norwich, Willington, Bozrah, Middletown, New London (UCMS); Westville [New Haven], New Haven, Plantsville [Southington] (YPM); Killingworth, Kent, Norfolk, Columbia, North Stonington, Willington, Weston, Hamden, Seymour-Bethany-Woodbridge corner (YPM); Meriden, Canaan, Waterford, Orange, Southington, Burlington (CTM).

*Oebalus pugnax* (Fabricius)

The Rice Stink Bug. Reported by Parshley (1923) from Stamford (as *Solubea pugnax*).

Additional Connecticut Records: Madison, Norwalk (CAES); Storrs [Mansfield] (CWS); Stratford (YPM); Hamden, on foliage of soybean (CTM).

*Trichopepla semivittata* (Say)

Distinctively hairy, with explanate pronotal margins.

Reported by Parshley (1923) from New Haven, Stony Creek [Branford], Woodmont [Milford], East Haven, and Meriden.

Additional Connecticut Records: Woodbury, Bridgeport, Berlin, Stratford, Hamden, Mansfield (CAES); Beacon Falls, Storrs [Mansfield], West Hartford, Ledyard, South Meriden [Meriden], West Willington [Willington] (UCMS); North

Haven, Seymour-Bethany-Woodbridge corner, Mt. Carmel [Hamden] (on Queen Ann's Lace), Woodbridge, Long Wharf [New Haven], Sleeping Giant State Park [Hamden], Stratford, Danbury, Hamden, Orange (YPM); Westport, Greenwich, Mystic [Stonington] (NMNH); Lakeville [Salisbury] (UMMZ).

### Halyini

Species in this tribe are easily and often confused with the Brown Marmorated Stink Bug.

#### *Parabrochymena arborea* (Say)

Reported by Parshley (1923), as *Brochymena arborea*, from New Canaan, Wallingford, Lyme, New Haven, North Branford, and Stonington.

Additional Connecticut Records: Westville [New Haven], Deep River, Yantic [Norwich] (CAES); Storrs and Mansfield Center [Mansfield], Mansfield, Windham Center [Windham], Windsor, Meriden, Hamden, Short Beach [Branford] (UCMS); West Rock [New Haven], Middlefield, Bloomfield, North Stonington, Willimantic [Windham], Fairfield, N. Haven [North Haven?], Cockaponsett State Forest [several towns, Middlesex County], No. Plain [East Haddam] (YPM); Greenwich, Putnam (AMNH); Watertown, Windsor, Cornwall, Hamden, East Hampton, Haddam, Wallingford, Hebron, Derby, Lebanon, (CTM).

#### *Brochymena carolinensis* (Westwood)

Not commonly collected.

Reported by Parshley (1923) from Rainbow [Windsor].

Additional Connecticut Records: Bristol (CAES); Mansfield, Storrs [Mansfield], Danbury, New Canaan (UCMS).

#### *Brochymena quadripustulata* (Fabricius)

Most common species of the genus in the state.

Reported by Parshley (1923) from Westville [New Haven], New Haven, New Canaan, South Glastonbury [Glastonbury], Norwalk, Manchester, Hamden, Middlebury, Wallingford, Westland [?doubtful CT], Bloomfield, Portland, Farmington, and Scotland.

Additional Connecticut Records: Bethany, Enfield, Meriden, Milford, Windsor, Westport (CAES); Storrs [Mansfield], Wallingford, Stamford (UCMS); Mansfield (CWS); Middlefield, Bridgewater, Brookfield, No. Plain [East Haddam], New Britain (YPM); Wilton, Litchfield (AMNH); Barkhamsted, Killingly (CTM).

### Nezarini

#### *Chinavia hilaris* (Say)

A large, nearly uniformly green species; common and widespread in CT.

Reported by Parshley (1923) from Westville [New Haven], New Canaan, Poquonock [Windsor], New Haven, Lyme, Farmington, Meriden, Sharon, Middlebury, and Southington.

Additional Connecticut Records: North Branford, Stamford, Norfolk, Westbrook, Portland, Stonington, West Hartford, Manchester, Harwinton, South Meriden [Meriden] (CAES); Storrs and Mansfield Center [Mansfield], Mansfield (also CWS), Stamford, Manchester, Coventry, Enfield, Vernon, West Willington [Willington], Hampton, Bethlehem, Hartford, New London, Nor-

wich, Windsor (UCMS); No. Plain [East Haddam], South Meriden [Meriden], Bethany, Woodbridge, Short Beach [Branford], Manchester, Plainville, North Haven, Fair Haven [New Haven], Sleeping Giant State Park [Hamden], North Ashford [Ashford], East Rock [New Haven - Hamden line], Stonington, Willimantic [Windham], Seymour-Bethany-Woodbridge corner, North Stonington, Niantic [Groton], Cos Cob [Greenwich] (YPM); Stamford, Meriden, Ashford, North Branford, Guilford, Weston, Hamden, Wallingford (CTM)

Note: This is another of the 5 species of stink bugs collected in the Hampton, Connecticut, UV trap in June 2012.

*Chinavia pennsylvanicum* (Gmelin)

Similar in color to *C. hilaris*, but smaller and more ovoid.

Reported by Parshley (1923) from Stonington, who stated that there are only 3 specimens known from New England.

Additional Connecticut records: We identified a single specimen from Windham County, Windham Center, 26 July 2003, J. O'Donnell, coll. (UCMS) as this species.

*Chlorochroa (Chlorochroa) persimilis* Horvath

A scarce and local species in New England.

Reported from Connecticut by Parshley (1923) from Manchester, Meriden, and Cornwall.

Additional Connecticut records: Mansfield (UCMS) .

*Chlorochroa (Rhytidolomia) saucia* (Say)

A dull olive-green to olive-brown species, inhabiting coastal marshes from MA to FL.

Reported by Parshley (1923) from Greenwich, Stony Creek [Branford], New Haven, Lyme, and East Haven.

Additional Connecticut Records: Madison (CAES) (UCMS) (CTM); Hamden (questionable locality, given the host plants are salt marsh grasses and this is an inland town), Savin Rock [West Haven], Groton (YPM).

*Chlorochroa (Rhytidolomia) senilis* (Say)

Larger than *C. saucia*; occurs only on salt marsh grasses.

Reported by Parshley (1923) from Branford, New Haven, and East Haven.

Additional Connecticut records: Guilford (YPM).

**Pentatomini**

*Banasa calva* (Say)

Males are easily told from *B. dimiata* by the shape of the pygophore opening (Hoffman 2005).

Reported by Parshley (1923) from Yalesville [Wallingford].

Additional Connecticut Records: Hartford, Branford (CAES); Hampton, Middletown, Brooklyn, Windham Center [Windham], Andover, Mansfield (also CWS), Storrs [Mansfield], Willimantic [Windham], Mt. Carmel [Hamden] (UCMS);

New Haven, No. Plain [East Haddam], Willimantic [Windham], Washington, Salisbury, Bethany, Ashford (YPM); Putnam, New Canaan (AMNH); Madison, Guilford, Southington (CTM); Lakeville [Salisbury] (UMMZ).

Note: This is one of 5 species of stink bugs collected in a UV trap in late June 2012 in Hampton, CT.

*Banasa dimidiata* (Say)

The shape of the pygophore opening (males) is diagnostic (Hoffman 2005).

We agree with Hoffman's (2005) interpretation of the spelling of the name.

Reported by Parshley (1923) from New Haven, Hartford, Wallingford, Portland, Stonington, Farmington, Union, Norfolk, Canaan, Southington, Hamden, and Marlborough.

Additional Connecticut records: Waterbury, Middlebury, Norwalk, Cornwall, Bethany, Monroe, Salisbury, Sharon, Goshen (CAES); Storrs and Mansfield Center [Mansfield], Mansfield (also CWS), Colebrook, Plymouth, Union, Ashford, Mt. Carmel [Hamden], Union, Ashford, North Voluntown [Voluntown], West Willington [Willington], Windsor, Windham, Hartford, Danbury (UCMS); Willimantic [Windham], Natchaug State Forest [Eastford] (YPM); Litchfield, New Canaan (AMNH); North Haven (CTM); Lakeville [Salisbury] (UMMZ).

Note: This is one of the 5 species of stink bugs collected together in a UV trap in Hampton, CT, in late June 2012.

*Banasa euchlora* Stål

Living on juniper, closely matching the color and pattern of the leaves.

Not previously reported from CT, but listed from MA in Froeschner (1988). More data are needed before it is known whether this species was just never collected before in CT, or is truly expanding its range.

CT records: Windham Co.: Hampton, Clarks Corner, 630 ft., 0.6 mi ESE BM577 power line cut, BLT [black light trap] June 20-21, 2012, E. L. Quinter, collector; an additional specimen was taken the night of July 13-14, 2012 (UCMS); Litchfield Co.: Ridgefield, 26 Chipmunk Lane, 18 January 2012, leg. Edward H. Seagraves, in wood pile (CTM).

Note: This is another of the 5 species of stink bugs taken in a single UV trap in Hampton, CT, in late June 2012.

*Banasa sordida* (Uhler)

Reported by Froeschner (1988) from Massachusetts. We are not aware of any published records for CT.

Connecticut records: Tolland County: Mansfield Center [Mansfield], December 21, 2011, C.W. Schaefer (1 female, UCMS); Tolland County: Mansfield Center [Mansfield], March 1, 2012, C.W. Schaefer, dead (1 male, UCMS); Windham County: Willimantic [Windham], South Ridge Drive, Mercury vapor light, 9 September 2002, leg. R.J. Pupedis (1 female, UCMS); New Haven County, "N. Haven", March 7, 1878, W.H. Patton (YPM); Middlesex County: Middletown, under powerlines between Dooley Pond and Coleman Road, 13-19 October 2005, leg. Chris T. Maier, on sticky band around girdled eastern red cedar, *Juniperus virginiana* L. (1 male, CTM). New Haven County: North Haven, 2 April 2001. W.L. Krinsky, on screened porch (YPM)

Note: This species is easily confused with *Holcostethus limbolarius*. The small abdominal projection is often difficult to see in *Banasa*, and the overall col-

oration and size of the two species are very similar. *Banasa soridida* tends to have greenish legs in the fresh specimens we examined; the pale lateral pronotal margins seem to be set off by darker, more thickly placed punctures in *Holcostethus*.

### Procliticini

*Dendrocoris humeralis* (Uhler)

Reported by Parshley (1923) from Meriden, Portland, Stonington, and Killingly.

Additional Connecticut records: New Haven, Bethany, South Meriden [Meriden] (CAES); Storrs [Mansfield], Hartford, Windsor, Norwich (UCMS); North Stonington, Hamden, Redding, Fairfield, Branford, New Haven, Hamden (YPM); North Haven, East Hampton (CTM).

### Sciocorini

*Sciocoris microphthalmus* Flor

A small, rare, and little known species, apparently with a northern distribution.

Froeschner (1988) lists it from CT. We examined no specimens.

### Strachiini

*Murgantia histrionica* (Hahn)

The well-known Harlequin Bug, named for its striking, variable red and black or orange and black markings.

Reported by Parshley (1923) from Meriden; he believed that this species had never become established in New England, being poorly adapted to withstand northern winters. He stated that of the two known specimens, one was brought into the state on vegetable products from the south, and the other probably so. Froeschner (1988) stated that the range of this species fluctuates markedly with the harshness or mildness of winter, migrating north during spring and summer. Froeschner (*ibid.*) also included New Hampshire and New York in its range.

Additional Connecticut records: Mt. Carmel [Hamden], 24 August 1939, R. Beard (2 specimens); and same place and collector, 5 Sept. 1939 (all CAES).

Pentatomine genera not placed in a tribe

We had difficulty identifying CT *Thyanta* to species, despite the excellent modern treatment of Rider and Chapin (1992). They state that *Thyanta calceata* and *Thyanta custator custator* can only be reliably separated by characters of the male genitalia. We did not have enough specimens available for meaningful comparisons.

*Thyanta calceata* (Say)

Reported by Parshley (1923) from New Canaan; Froeschner (1988) stated that Blatchley's "New England" record was not confirmed by Ruckes (1957). Blatchley's record probably came from Parshley (1923). Ruckes (1957) does not specifically exclude Connecticut, but does not include it in the list of localities for this species given in his key (p. 21); he did not deal with the species in his paper otherwise, except to note that there are no color differences between *T. calceata* and *T. custator*. Rider and Chapin (1992) listed Litchfield and New

Haven counties as Connecticut localities, and their map shows several symbols in CT and neighboring Massachusetts and New York, but they provide only county records.

Additional Connecticut records: Salisbury (YPM); (Twin Lakes [Salisbury] (NMNH).

*\*Thyanta custator accerra* McAtee

The range map for *Thyanta custator* in Ruckes (1957) includes CT; Froeschner (1988) listed it from CT. *Thyanta accerra* was treated as a separate species in Froeschner (*ibid.*), and reported from New York. Rider and Chapin (1992) reported *Thyanta custator acerra* from New York, New Jersey, New Hampshire, and Maine, so it could be found in CT.

Connecticut records (provisional): several specimens from New Haven County, New Haven, Long Wharf Nature Preserve, August to October, 1994 and 1995, C.L. Remington (UCMS); New Haven County, North Haven, near exit 12 (US Hwy. 5) of Interstate 91, 41° 24.117' N, 72° 51.039' W, 2 Aug. 2006, leg. Chris T. Maier (CTM).

*\*Thyanta custator custator* (Fabricius)

The range map in Rider and Chapin (1992) shows a symbol in Suffolk County, NY, the closest locality to CT. This subspecies could also be in CT. Parshley (1923) thought that *T. custator* probably occurred in CT, because the species is common southward.

### Subfamily Podopinae

#### Podopini

*\*Amaurochrous brevitylus* (Barber and Sailer)

Some old records are under the name *A. parvulus*.

Reported in Froeschner (1988) from Massachusetts and New York, but it has not yet been taken in Connecticut.

*Amaurochrous cinctipes* (Say)

Reported by Parshley (1923) (as *Podops cinctipes*) from New Haven, Meriden, and North Branford.

Additional Connecticut records: Portland, Berlin, South Meriden [Meriden] (CAES); Storrs and Mansfield Center [Mansfield], Mansfield (also CWS), Madison, Glastonbury, Windsor, Danbury, Stonington (UCMS); East Meriden [Meriden] (YPM).

### Discussion

The most striking pattern to emerge from locality information presented above is that the data are highly biased towards two centers of entomology in the state: the Connecticut Agricultural Experiment Station and Yale University in the greater New Haven area, and the University of Connecticut in Storrs. Thus, the locality data presented above are more a representation of collectors' hometowns and favorite haunts than an accurate assessment of the ranges of species in Connecticut. Understanding current ranges, let alone any increase, shift, or decrease in those ranges, of lesser-known insects like stink bugs will remain problematic until distribution information for many more collections is made available. It is critical to do so because conservation and land-use decisions continue to be made



on a presence/absence basis of a relatively small subset of invertebrates.

A few broad patterns emerge, and it is possible to recognize a number of faunal elements:

1) Coastal: this distribution pattern consists of species found along the coastal plain, often including the Gulf Coast. (Technically, Connecticut does not have any true coastal plain.) This is a small but well-defined element in the Connecticut fauna, and includes *Thyanta custator*, *Chlorochroa (Rhytidolomia) saucia*, *Chlorochroa (Rhytidolomia) senilis* and perhaps *Brochymena carolinensis*.

2) Northern: This is not strictly a boreal element, but consists of species that have a distribution almost across the continent but which do not extend further south than New England, New York, northern Illinois, Nebraska, etc. This element can be considered to extend only slightly south of the old "transition" zone. *Sciocoris microphthalmus* would be an example.

3) North and Central: This is one of the predominant distribution patterns for Connecticut pentatomids, and includes species that are widespread in the northern states but do not extend deeply into the southern states. In the east, several species do not occur south of New Jersey, but the majority reach Virginia and North Carolina, although in some cases only in the western highlands. Some of these species are countrywide in the north, but others do not extend into or beyond the Rocky Mountains; a couple additional species are not known west of Illinois.

4) North-Central-Southern: The species that exhibit this distribution pattern are found east of the Rockies and thus have a distribution similar to 3) above, but they extend into the deep south, the majority reaching Florida and the Gulf states.

5) Country-wide: These species seem to be distributed virtually throughout the United States.

6) Southern: Only *Murgantia histrionica* has a distinctly southern distribution and it is actually a questionable naturally occurring species (see species account).

7) Western: *Perillus bioculatus* probably represents a species that originally had a strictly western distribution and then spread eastward following spread of its principal prey, the Colorado Potato Beetle.

8) Introduced (non-native): The Brown Marmorated Stink Bug, *Halyomorpha halys*, was unknown in Connecticut prior to 2008.

### Acknowledgments

Richard Packauskas (Fort Hays State University, Kansas) and JOD started this manuscript many years ago, based on notebooks given to us by the late James A. Slater. We thank the following individuals for access and/or loan of specimens in their care: Dr. Raymond Pupedis (YPM); Dr. Chris T. Maier (CTM); and Dr. Kirby Stafford and Dr. Gale Ridge (CAES). Daniel Swanson provided the records from UMMZ. Casey James, University of Connecticut, helped transcribe and organize locality data.

### Literature Cited

Froeschner, R. C. 1988. Family Pentatomidae Leach, 1815. The Stink Bugs, pp. 544–597. In T. J. Henry, and R. C. Froeschner (eds.), Catalog of the Heteroptera, or True Bugs, of Canada and the Continental United States. E. J. Brill, Leiden, Kobenhavn,



Koln. 958 pp.

- Hoffman, R. L. 1971.** The Insects of Virginia: No. 4: Shield Bugs (Hemiptera: Scutelleridea, Scutelleridae, Corimelaenidae, Cydnidae, Pentatomidae). Research Division Bulletin 67, Virginia Polytechnic Institute and State University. 61 pp.
- Hoffman, R. L. 2005.** The Virginia species of *Banasa*, three decades later (Heteroptera: Pentatomidae). *Banisteria* 25: 41–44.
- McPherson, J. E. 1982.** The Pentatomoidea (Hemiptera) of northeastern North America with emphasis on the fauna of Illinois. Southern Illinois University Press, Carbondale and Edwardsville. 240 pp.
- Parshley, H. M. 1923.** Family Pentatomidae, pp. 753–776. In W. E. Britton (ed). Guide to the Insects of Connecticut. Part IV. The Hemiptera or Sucking Insects of Connecticut. Connecticut Geological and Natural History Survey of Connecticut Bulletin 34: 1–807.
- Phillips, K. A. 1982.** A taxonomic revision of the Nearctic species of *Apateticus* Dallas and *Podisus* Herrich-Schaeffer (Heteroptera: Pentatomidae: Asopinae). Ph.D dissertation, Oregon State University.
- Rider, D. A. 2012.** Pentatomoidea Home Page. (<http://www.ndsu.nodak.edu/ndsu/rider/Pentatomoidea/index.htm>). Accessed June 2012.
- Rider, D. A., and J. B. Chapin. 1992.** Revision of the genus *Thyanta* Stål, 1862 (Heteroptera: Pentatomidae) II. North America, Central America, and the West Indies. *Journal of the New York Entomological Society* 100(1): 42–98.
- Ruckes, H. 1957.** The taxonomic status and distribution of *Thyanta custator* (Fabricius) and *Thyanta pallido-virens* (Stål) (Heteroptera: Pentatomidae). *American Museum Novitates* 1824: 1–23.
- Schuh, R. T., and J. A. Slater. 1995.** True Bugs of the World (Hemiptera: Heteroptera): Classification and Evolution. Cornell University Press, Ithaca, NY. Xii + 336 pp.
- Slater, J. A. 1974.** A preliminary analysis of the derivation of the Heteroptera fauna of the Northeastern United States with special reference to the fauna of Connecticut. 25<sup>th</sup> Anniversary Memoirs, Connecticut Entomological Society, New Haven, pp. 145–213.
- State of Connecticut. 2012.** Towns and Cities in Connecticut. (<http://www.ct.gov/ctportal/cwp/view.asp?a=843&q=257266>). Accessed June 2012.
- Torre-Bueno, J. R. de la. 1933.** Records of Connecticut Heteroptera. *Bulletin of the Brooklyn Entomological Society* 28(1): 36.
- Thomas, D. B. 1992.** Taxonomic synopsis of the asopine Pentatomidae (Heteroptera) of the Western Hemisphere. *Entomological Society of America, Thomas Say Foundation Monographs*, Volume XVI: iv + 156 pp.
- Thomas, D. B. 2012.** *Mcphersonarcys*, a new genus for *Pentatoma aequalis* Say (Heteroptera: Pentatomidae). *The Great Lakes Entomologist* 45: 127–133.
- Wheeler, A. G., Jr. 1999.** Southern range extension of a Palearctic stink bug *Picromerus bidens* (Hemiptera: Pentatomidae), in North America. *Entomological News* 110 (2): 97–98.