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DISTRIBUTIONAL PATTERNS OF SOUTHEASTERN
MAYFLIES (Ephemeroptera)

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DISTRIBUTIONAL PATTERNS OF SOUTHEASTERN MAYFLIES (EPHEMEROPTERA)¹

LEWIS BERNER²

SYNOPSIS: Distributional records of mayflies (Ephemeroptera) occurring in the southeastern states of Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee are given along with the stage of development of the insect and the month it was collected. Previously published state records are summarized and each species is assigned physiographic provinces to help the user of the data relate distribution to terrain.

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¹ Florida Agricultural Experiment Station Journal Series No. 5948.

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INTRODUCTION

For many years I have been accumulating records of southeastern mayflies, many of which have never been published. Because of the increasing interest that has been generated in these insects in recent years and their relationship to water quality studies, I feel that it is now appropriate to bring these data together for the use of aquatic biologists of the eight southeastern states included in this paper.

During the years 1953-1961, I received support from the Public Health Service (Grant No. RG4058) to make a detailed study of mayflies of the southeast. Because of distances involved and time limitations, I confined my work to the following states: Alabama, Florida, Georgia, Louisiana (eastern half), Mississippi, North Carolina, South Carolina, and Tennessee. Admittedly the delimitation was arbitrary, for certainly other states or parts of them should have been included. Hopefully this publication will stimulate scientists working in Virginia, Kentucky, Arkansas, Texas and other contiguous states, usually considered as southeastern, to augment these records.

The temptation to include systematic and ecological notes in this paper is great but time and space do not allow such broadening of the subject. Some of my later papers will be concerned with these matters. Space limitations prevent listing of specific localities but the county and month of collection are given.

ACKNOWLEDGMENTS AND EXPLANATIONS

Unless otherwise specified, all collections were made by me, my assistants, especially Dr. C. D. Hynes, or friends, and all specimens and records are deposited in the Florida State Collection of Arthropods of the Division of Plant Industry. I am indebted to the Highlands Biological Station, North Carolina, for its support of my studies over many years.

For the sake of completeness, I have included all published records available to me. In the late 1950's I was given the opportunity to study the mayfly collections of the Illinois Natural History Survey, the Academy of Natural Sciences of Philadelphia, the Fattig Collection of Emory University, and the Clemson College Entomological Collection. At the time of my visits to these institutions I was authorized to include their southeastern records in my publications. Each such record is appropriately recognized by a superscript as follows: 1. Illinois Natural History Survey; 2. Academy of Natural Sciences of Philadelphia; 3. Fattig Collection; 4. Clemson College.

State records published prior to 1935 are not listed unless the book, "The Biology of Mayflies" by Needham, Traver, and Hsu, failed to include specific references to them. To avoid lengthy citations in this section, generally only the initials of the author or authors and the date of publication are given. In the list of references at the end of this paper the symbols used are given with the complete citation.

To allow the reader to make some estimate of time of year when adults may be on the wing, I have designated the stage collected, using the following symbols: N = nymph, A = adult.

PHYSIOGRAPHIC PROVINCES AND ASSIGNED COUNTIES

I consider it desirable to relate patterns of distribution in terms of the physiographic regions from which the records come. To allow easy placement

of species records in physiographic provinces, I have assigned counties of each state as nearly as possible using the criteria generally recognized for distinguishing them. The provinces, shown in figure 1, are: (1) *Coastal Plain* (CP)—altitudes below 500 feet with more than half the plain being below 100 feet in elevation. (2) *Piedmont* (P)—altitudes range from 500 feet at the Fall Line to about 1000 feet at the base of the mountains to the west. (3) *Blue Ridge* (BR)—narrow, varying from 5 to 50 miles in width. Easternmost ridge of the Appalachian Highlands and rising 1000-5000 feet above the Piedmont. (4) *Valley and Ridge* (VR)—much folded mountains with thrust faulting in the southern part. (5) *Appalachian Plateaus* (AP)—almost equal in area to the Piedmont, Blue Ridge, and Valley and Ridge provinces combined. An elevated tract of nearly horizontal or gently folded strata with altitudes from 1000 feet along the western edge to about 3000 feet to the east. (6) *Interior Low Plateaus* (ILP)—part of a broad anticline.

COASTAL PLAIN

ALABAMA: Baldwin, Barbour, Bullock, Butler, Choctaw, Clarke, Coffee, Conecuh, Covington, Crenshaw, Dale, Dallas, Escambia, Geneva, Greene, Hale, Henry, Houston, Lamar, Lowndes, Macon, Marengo, Mobile, Monroe, Montgomery, Perry, Pickens, Pike, Russell, Sumter, Washington, Wilcox.

FLORIDA: All counties

GEORGIA: Appling, Atkinson, Bacon, Baker, Ben Hill, Berrien, Bibb, Bleckley, Brantley, Brooks, Bryan, Bulloch, Burke, Calhoun, Camden, Candler, Charlton, Chatham, Chattahoochee, Clay, Clinch, Coffee, Colquitt, Cook, Crawford, Crisp, Decatur, Dodge, Dooly, Dougherty, Early, Echols, Effingham, Emanuel, Evans, Glynn, Grady, Harris, Houston, Irwin, Jeff Davis, Jefferson, Jenkins, Johnson, Lanier, Laurens, Lee, Liberty, Long, Lowndes, McIntosh, Macon, Marion, Miller, Mitchell, Montgomery, Muscogee, Peach, Pierce, Pulaski, Quitman, Randolph, Richmond, Schley, Screven, Seminole, Stewart, Sumter, Talbot, Tattanall, Taylor, Telfair, Terrell, Thomas, Tift, Toombs, Treutlen, Turner, Twiggs, Ware, Washington, Wayne, Webster, Wheeler, Wilcox, Wilkinson, Worth.

LOUISIANA: All counties.

MISSISSIPPI: All counties.

NORTH CAROLINA: Beaufort, Bertie, Bladen, Brunswick, Camden, Carteret, Chowan, Columbus, Craven, Cumberland, Currituck, Dare, Duplin, Edgecombe, Gates, Greene, Halifax, Harnett, Hertford, Hoke, Hyde, Johnston, Jones, Lenoir, Martin, Nash, New Hanover, Northampton, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Pitt, Richmond, Robeson, Sampson, Scotland, Tyrrell, Washington, Wayne, Wilson.

SOUTH CAROLINA: Aiken, Allendale, Bamberg, Barnwell, Beaufort, Berkeley, Calhoun, Charleston, Clarendon, Colleton, Darlington, Dillon, Dorchester, Florence, Georgetown, Hampton, Horry, Jasper, Lee, Lexington, Marion, Marlboro, Orangeburg, Richland, Sumter, Williamsburg.

TENNESSEE: Benton, Carroll, Chester, Crockett, Decatur, Dyer, Fayette, Gibson, Hardeman, Hardin, Haywood, Henderson, Henry, Lake, Lauderdale, McNairy, Madison, Obion, Shelby, Tipton, Weakley.

PIEDMONT PROVINCE

ALABAMA: Autauga, Chambers, Chilton, Clay, Elmore, Lee, Randolph, Tallapoosa.

GEORGIA: Baldwin, Barrow, Butts, Carroll, Cherokee, Clark, Clayton, Cobb, Columbia, Coweta, DeKalb, Douglas, Elbert, Fayette, Franklin, Fulton, Glascock, Greene, Gwinnett, Hall, Hancock, Haralson, Hart, Heard, Henry, Jackson, Jasper, Jones, Lamar, Lincoln, McDuffie, Madison,

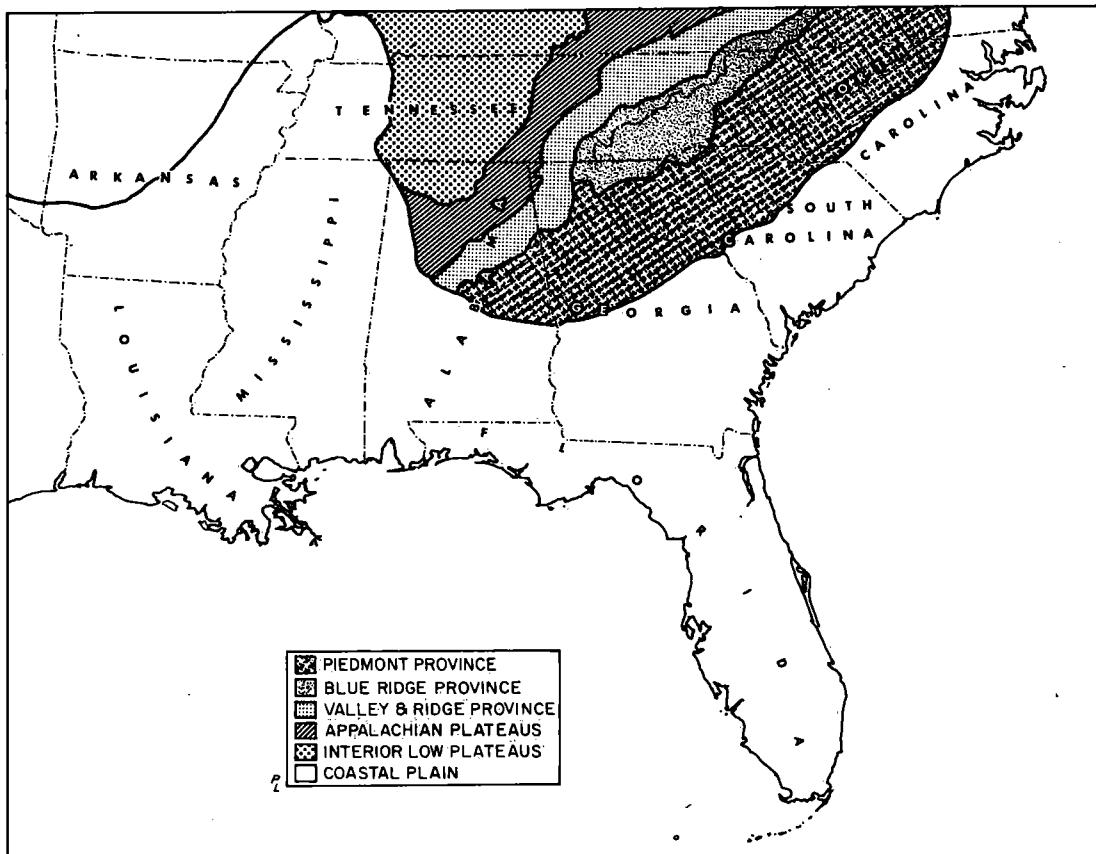


Figure 1.—Physiographic provinces of the southeastern United States.

Meriwether, Monroe, Morgan, Newton, Oconee, Oglethorpe, Paulding, Pike, Putnam, Rockdale, Spaulding, Taliaferro, Troup, Upson, Walton, Warren, Wilkes.

NORTH CAROLINA: Alamance, Anson, Cabarrus, Caswell, Chatham, Cleveland, Davidson, David, Durham, Forsyth, Franklin, Granville, Guilford, Iredell, Lee, Mecklenburg, Montgomery, Moore, Orange, Person, Randolph, Rockingham, Rowan, Stanly, Stokes, Surry, Union, Vance, Wake, Warren, Yadkin.

SOUTH CAROLINA: Abbeville, Aiken, Anderson, Cherokee, Chester, Chesterfield, Edgefield, Fairfield, Greenville, Greenwood, Kershaw, Lancaster, Laurens, Lexington, McCormick, Newberry, Richland, Saluda, Spartanburg, Union, York.

BLUE RIDGE PROVINCE

GEORGIA: Banks, Habersham, Lumpkin, Rabun, Stephens, Towns, Union, White.

NORTH CAROLINA: Alexander, Alleghany, Ashe, Avery, Buncombe, Burke, Caldwell, Catawba, Cherokee, Clay, Cleveland, Gaston, Graham, Haywood, Henderson, Jackson, Lincoln, McDowell, Macon, Madison, Mitchell, Polk, Rutherford, Surry, Swain, Transylvania, Watauga, Wilkes, Yancey.

SOUTH CAROLINA: Greenville, Oconee, Pickens

TENNESSEE: Blount, Carter, Cocke, Greene, Johnson, Monroe, Polk, Rhea, Sevier, Sullivan, Unicoi, Washington.

VALLEY AND RIDGE PROVINCE

ALABAMA: Bibb, Calhoun, Cleburne, Coosa, Saint Clair, Shelby, Talladega.

GEORGIA: Bartow, Catoosa, Chattooga, Dawson, Fannin, Floyd, Forsyth, Gilmer, Gordon, Murray, Pickens, Polk, Walker, Whitfield.

TENNESSEE: Bradley, Claiborne, Grainger, Hamblen, Hamilton, Hancock, Hawkins, Jefferson, Knox, Loudon, McMinn, Meigs, Rhea, Roane, Union.

APPALACHIAN PLATEAUS

ALABAMA: Blount, Cherokee, Cullman, DeKalb, Etowah, Fayette, Franklin, Jackson, Jefferson, Marion, Marshall, Morgan, Tuscaloosa, Walker, Winston.

GEORGIA: Dade

TENNESSEE: Anderson, Bledsoe, Campbell, Coffee, Cumberland, DeKalb, Fentress, Franklin, Grundy, Marion, Moore, Morgan, Overton, Pickett, Putnam, Scott, Sequatchie, Van Buren, Warren, White.

INTERIOR LOW PLATEAUS

ALABAMA: Colbert, Lauderdale, Lawrence, Limestone, Madison

TENNESSEE: Bedford, Cannon, Cheatham, Clay, Davidson, DeKalb, Dickson, Giles, Hickman, Houston, Humphreys, Jackson, Lawrence, Lewis, Lincoln, Macon, Marshall, Maury, Montgomery, Perry, Robertson, Rutherford, Smith, Stewart, Sumner, Trousdale, Wayne, Williamson, Wilson.

DISCUSSION

The geographic distribution of mayflies is a reflection of ecologically adaptive features developed by the nymphs and are the ones most severely limiting the spread of the species. The southeastern mayfly fauna is a large one with more than 250 species collected in the states included in this study.

The greatest variety occurs in the regions with the most varied aquatic habitats, particularly those with a wide range of stream types.

The southeastern United States is well-endowed with waterways and these have served as the pathways for the spread of species into all suitable stream systems. The bulk of the species are inhabitants of flowing waters in the immature stages and the most diverse habitats are located in the uplands.

Table 1 summarizes the distributional patterns of the various genera based on their presumed area of origin. Following the concepts of Dr. George F. Edmunds *et al.* (1976) with regard to Ephemeropteran origins, mid-austral genera are derived from South America or South American ancestors and extend through Central America and Mexico into the southern part of the United States. Some of these mid-austral genera have frequently moved into the central United States and central Canada via major river systems. The upper austral genera are clearly of southern origin but have a few species that extend their ranges northward into Canada. The boreal genera are Holarctic or Nearctic, the latter being closely related to Holarctic forms. The mid-boreal genera are generally distributed southwards in the United States and their immatures are adapted to living in cool waters. The lower boreal genera range southwards into Mexico and sometimes into South America.

The austral element in the southeast appears to have been derived by movement northwards from Mexico and through the warm-water streams of the southern Coastal Plain. Boreal elements left in the warm waters of the southern Coastal Plain are probably relicts of Pleistocene glaciation. The few austral species in the genera *Callibaetis*, *Paracloeodes*, *Homoeoneuria*, *Lepthophyes*, *Tricorythodes*, *Hexagenia*, *Pentagenia*, and *Tortopus* moved into the United States via Mexico and spread widely. Of the eight, *Paracloeodes* and *Homoeoneuria* seem to be the most highly restricted. None of the genera, other than *Callibaetis* and *Hexagenia*, have succeeded in diversifying extensively as they moved northwards and they are represented by only one or a few northern species. There seems to have been no movement from the islands of the Antilles into the southeastern United States, likely because of the lack of suitable habitats for the immatures in Florida, the most probable land mass to be colonized from the Greater Antilles, other than Central America or Mexico.

Table 2 lists the genera associated with each of the southeastern physiographic provinces. The greatest number, by far, occurs in all six divisions. Most of those of limited distribution have an austral origin. The Blue Ridge province with its multitude of fast-flowing, cool streams has the largest number of species, while the slow-flowing waters of that part of the Interior Low Plateaus studied has the fewest.

TABLE 1.—GEOGRAPHIC DISTRIBUTION OF THE MAYFLIES OF THE SOUTHEASTERN UNITED STATES.

Mid-Austral	Upper Austral	Lower Boreal	Mid-Boreal	Cosmopolitan
<i>Homoeoneuria</i>	<i>Callibaetis</i>	<i>Brachycercus</i>	<i>Acanthametropus</i>	<i>Heterocloeon</i>
<i>Leptohyphes</i>	<i>Hexagenia</i>	<i>Caenis</i>	<i>Ameletus</i>	<i>Leptophlebia</i>
<i>Paracloeodes</i>	<i>Tricorythodes</i>	<i>Choroterpes</i>	<i>Aneporus</i>	<i>Litobrancha</i>
<i>Pentagenia</i>		<i>Heptagenia</i>	<i>Baetisca</i>	<i>Neophemera</i>
<i>Tortopus</i>		<i>Isonychia</i>	<i>Centroptilum</i>	<i>Paraleptophlebia</i>
		<i>Stenonema</i>	<i>Cinygmulia</i>	<i>Potamanthus</i>
			<i>Cloeon</i>	<i>Pseudiron</i>
			<i>Dolania</i>	<i>Pseudocloeon</i>
			<i>Epeorus</i>	<i>Rhithrogena</i>
			<i>Ephemerā</i>	<i>Siphlonurus</i>
			<i>Ephemerella</i>	<i>Siphloplecton</i>
			<i>Ephoron</i>	<i>Spinadis</i>
			<i>Habrophlebia</i>	<i>Stenacron</i>
			<i>Habrophlebiodes</i>	

TABLE 2.—DISTRIBUTION OF SOUTHEASTERN GENERA OF MAYFLIES AS RELATED TO PHYSIOGRAPHIC PROVINCES IN WHICH THEY OCCUR.

GENUS	Coastal Plain	Piedmont	Blue Ridge	Valley and Ridge	Appalachian Plateaus	Interior Low Plateaus
<i>Acanthametropus</i>	X					
<i>Anopeorus</i>		X				
<i>Dolania</i>	X					
<i>Litobrancha</i>			X			
<i>Spinadis</i>	X					
<i>Tortopus</i>	X					
<i>Homoeoneuria</i>	X		X			
<i>Leptohyphes</i>	X		X			
<i>Pentagenia</i>	X		X			
<i>Baetisca</i>	X		X	X		
<i>Choroterpes</i>	X			X		X
<i>Cinygnula</i>				X	X	
<i>Habrophlebia</i>	X		X	X		
<i>Heterocloeon</i>	X		X	X		
<i>Pseudiron</i>	X		X	X		
<i>Siphloplecton</i>	X		X	X		
<i>Ameletus</i>			X	X	X	X
<i>Brachycercus</i>	X		X	X		
<i>Epeorus</i>	X		X	X		
<i>Neophemera</i>	X		X		X	
<i>Paracloeodes</i>	X		X		X	

<i>Callibaetis</i>	X	X	X	X	X	X	X
<i>Ephemeran</i>	X	X	X	X	X	X	X
<i>Habrophlebiodes</i>	X	X	X	X	X	X	X
<i>Leptophlebia</i>	X	X	X	X	X	X	X
<i>Potamanthus</i>	X	X	X	X	X	X	X
<i>Siphlonurus</i>	X	X	X	X	X	X	X
 <i>Baetis</i>	 X						
<i>Caenis</i>	X	X	X	X	X	X	X
<i>Centropilum</i>	X	X	X	X	X	X	X
<i>Cloeon</i>	X	X	X	X	X	X	X
<i>Ephemerella</i>	X	X	X	X	X	X	X
<i>Heptagenia</i>	X	X	X	X	X	X	X
<i>Hexagenia</i>	X	X	X	X	X	X	X
<i>Isonychia</i>	X	X	X	X	X	X	X
<i>Paraleptophlebia</i>	X	X	X	X	X	X	X
<i>Pseudocloeon</i>	X	X	X	X	X	X	X
<i>Rhithrogena</i>	X	X	X	X	X	X	X
<i>Stenacron</i>	X	X	X	X	X	X	X
<i>Stenonema</i>	X	X	X	X	X	X	X
<i>Tricorythodes</i>	X	X	X	X	X	X	X
Total no. genera	38	33	33	25	22	22	22
Total no. species	111	93	150	85	63	63	49

SYSTEMATIC LISTING OF SOUTHEASTERN GENERA³

Heptagenioidea	Caenidae
Siphlonuridae	Caeninae
Siphlonurinae	<i>Brachycercus</i>
<i>Ameletus</i>	<i>Caenis</i>
<i>Siphlonurus</i>	Prosopistomatoidea
Acanthametropodinae	Baetiscidae
<i>Acanthametropus</i>	Baetiscinae
Isonychiinae	<i>Baetisca</i>
<i>Isonychia</i>	Leptophlebioidea
Metretopodidae	Leptophlebiidae
Metretopodinae	Leptophlebiinae
<i>Siphloplecton</i>	<i>Choroterpes</i>
Baetidae	<i>Habrophlebia</i>
Baetinae	<i>Habrophlebiodes</i>
<i>Baetis</i>	<i>Leptophlebia</i>
<i>Callibaetis</i>	<i>Paraleptophlebia</i>
<i>Centroptilum</i>	Ephemerellidae
<i>Cloeon</i>	Ephemerellinae
<i>Heterocloeon</i>	<i>Ephemerella</i>
<i>Paracloeodes</i>	Tricorythidae
<i>Pseudocloeon</i>	Leptohyphinae
Oligoneuriidae	<i>Leptohyphes</i>
Oligoneuriinae	<i>Tricorythodes</i>
<i>Homoeoneuria</i>	Ephemeroidea
Heptageniidae	Behningiidae
Pseudironinae	<i>Behningiinae</i>
<i>Pseudiron</i>	<i>Dolania</i>
Heptageniinae	Potamanthidae
<i>Cinygmulia</i>	Potamanthinae
<i>Epeorus</i>	<i>Potamanthus</i>
<i>Heptagenia</i>	Ephemeridae
<i>Rhithrogena</i>	Ephemerinae
<i>Stenacron</i>	<i>Ephemera</i>
<i>Stenonema</i>	<i>Hexagenia</i>
Spinadinae	<i>Litobrancha</i>
<i>Spinadis</i>	<i>Pentagenia</i>
Anepeorinae	Polymitarcidae
<i>Anepeorus</i>	Polymitarcinae
Caenoidea	<i>Ephoron</i>
Neoephemeridae	<i>Campsurinae</i>
<i>Neoephemerinae</i>	<i>Tortopus</i>
<i>Neoephemera</i>	

SUPERFAMILY HEPTAGENIOIDEA

FAMILY SIPHONURIDAE

SUBFAMILY SIPHONURINAE

GENUS *Ameletus* EATON*Ameletus lineatus* Traver

Physiographic provinces: BR, VR, AP, ILP.

Previously published state records: N.C., NTH, 1935; Tenn., WB, 1949.

³ Higher categories after Dr. George F. Edmunds, Jr.

Additional records: NORTH CAROLINA, McDowell Co., April (N,A); TENNESSEE, Cumberland Co., April (N); Fentress Co., May (A); Grainger Co., April (N,A); Lincoln Co., April (N); Marion Co., April (N); Overton Co., April (N); Sevier Co., April (A).

Ameletus species

Physiographic provinces: BR, VR, AP.

Additional records: ALABAMA, DeKalb Co., April (A). NORTH CAROLINA, Avery Co., February and April (N); Clay Co., April (N); Macon Co., May (N); Orange Co., February and May (N); Swain Co., April, May, and December (N); Transylvania Co., March and June (N); Yancey Co., February, May, and July (N). TENNESSEE, Meigs Co., April (N); Sevier Co., April, May (N), July (A).

GENUS *Siphlonurus* EATON

Siphlonurus decorus Traver

Physiographic provinces: CP

Previously published state records: N.C., NTH, 1935.

Additional records: SOUTH CAROLINA, Orangeburg Co., April (A).

Siphlonurus luridipennis (Burmeister)

Previously published state records: Carolina, Bur., 1839

Additional records: None

Siphlonurus marginatus Traver

Physiographic provinces: P

Previously published state records: N.C., NTH, 1935

Additional records: None

Siphlonurus mirus Eaton

Physiographic provinces: P, BR

Previously published state records: GEORGIA, Cowetta Co., April (A)³; NORTH CAROLINA, Macon Co., June (A). SOUTH CAROLINA, Greenville Co., March and April (A)⁴; Newberry Co., April (N)⁴.

Siphlonurus quebecensis (Provancher)

Physiographic provinces: P, BR, VR, AP

Previously published state records: N.C., S.C., NTH, 1935; Tenn., WB, 1949.

Additional records: NORTH CAROLINA, Wake Co., April (A). SOUTH CAROLINA, Anderson Co., April (A)⁴; Greenville Co., April (A)⁴. TENNESSEE, Cumberland Co., April (N); Fentress Co., May (A); Greene Co., May (A).

Siphlonurus species

Physiographic provinces: P, BR, VR, AP

Additional records: GEORGIA, Catoosa Co., March (N)³; Clayton Co., March (N)³; Fulton Co., March (A)³; Towns Co., April (A)³. SOUTH CAROLINA, Newberry Co., April (A)⁴; Greenville Co., April (N)⁴. TENNESSEE, Cumberland Co., April (N); Fentress Co., May (A); Greene Co., May (A).

SUBFAMILY ACANTHAMETROPODINAE

GENUS *Acanthametropus* TSHERNOVA

Acanthametropus species

Physiographic provinces: CP

Previously published state records: Ga.-S.C. state line, EAP, 1963

Additional records: None

SUBFAMILY ISONYCHIINAE
GENUS *Isonychia* EATON

Isonychia annulata Traver

Physiographic provinces: P

Previously published state records: N.C., NTH, 1935

Additional records: None

Isonychia aurea Traver

Physiographic provinces: BR, VR

Previously published state records: N. C., NTH, 1935, TH, 1941

Additional records: GEORGIA, Fannin Co., July (A)³; Habersham Co., June (A), July (A)¹; Lumpkin Co., July (A)¹; Rabun Co., August (N,A). NORTH CAROLINA, Jackson Co., August (N,A); Macon Co., June (A), July and August (N,A), September (A); Swain Co., August (N). SOUTH CAROLINA, Oconee Co., October (N)⁴. TENNESSEE, Sevier Co., July (A).

Isonychia bicolor (Walker)

Physiographic provinces: CP

Previously published state records: N. C., NTH, 1935 (as *I. albomanicata*); S. C., Bks, 1953.

Additional records: MISSISSIPPI, Lauderdale Co., June (A).

Isonychia christina Traver

Physiographic provinces: ILP

Previously published state records: None

Additional records: TENNESSEE, Cheatham Co., July (A); Hickman Co., July (A).

Isonychia circe Traver

Physiographic provinces: P, BR, VR, AP

Previously published state records: Ga., NTH, 1935; Ala., Trv., 1937.

Additional records: ALABAMA, Bibb Co., June (A); Walker Co., June (N,A). GEORGIA, Cherokee Co., August (A); Coweta Co., June (A)³; Fulton Co., August (A)³; Habersham Co., August (A)¹; Lumpkin Co., August (N,A); Walton Co., August (A)³.

Isonychia diversa Traver

Physiographic provinces: VR

Previously published state records: Tenn., NTH, 1935.

Additional records: None.

Isonychia fattigi Traver

Physiographic provinces: CP, P, BR, VR

Previously published state records: Ala., Trv., 1937; Fla., Sch, 1967; Ga., NTH, 1935; Tenn., WB, 1949.

Additional records: ALABAMA, Bibb Co., June (N,A); Macon Co., June (A); Perry Co., June (A). FLORIDA, Escambia Co., August (A); Gadsden Co., June (A); Santa Rosa Co., June (A). GEORGIA, Baker Co., March, April, and September (A); Cherokee Co., June (A); Decatur Co., June (A), November (N); Fulton Co., June (A)¹; Lumpkin Co., July (A); Walton Co., June (N,A)³; White Co., July (A)¹; Whitfield Co., June (A)³. MISSISSIPPI, Itawamba Co., July (A); Lauderdale Co., July (N,A). TENNESSEE, Cocke Co., June (A); Sevier Co., August (A).

Isonychia georgiae McDunnough

Physiographic provinces: P, BR.

Previously published state records: Ga., McD., 1931, NTH, 1935; N.C., Wy., 1968.

Additional records: GEORGIA, Cherokee Co., (N,A); Rabun Co., June (A)³; Union Co., June (A)³; White Co., July (A)³.

Isonychia harperi Traver

Physiographic provinces: BR.

Previously published state records: none.

Additional records: NORTH CAROLINA, Macon Co., August (A).

Isonychia matilda Traver

Physiographic provinces: BR.

Previously published state records: none.

Additional records: NORTH CAROLINA, Macon Co., August (A).

Isonychia notata Traver

Physiographic provinces: BR.

Previously published state records: N. C., NTH, 1935, Trv., 1937, H, 1941

Additional records: GEORGIA, Rabun Co., July (N). NORTH CAROLINA, Swain Co., June (A).

Isonychia obscura Traver

Physiographic provinces: BR.

Previously published state records: N. C., NTH, 1935; Tenn., WB, 1949.

Additional records: NORTH CAROLINA, Haywood Co., July (A) TENNESSEE, Greene Co., May (A).

Isonychia pacoleta Traver

Physiographic provinces: BR.

Previously published state records: N. C., NTH, 1935; Tenn., WB, 1949.

Additional records: TENNESSEE, Greene Co., March (N).

Isonychia pictipes Traver

Physiographic provinces: CP, P, BR.

Previously published state records: Fla., Ber., 1950, 1958, Sch, 1967; Ga., NTH, 1935.

Additional records: ALABAMA, Dallas Co., June (A); Escambia Co., June (A); Macon Co., June (A); Perry Co., June (N,A); Washington Co., May (A). FLORIDA, Gadsden Co., April (N,A), June (A); Gilchrist Co., October (A); Liberty Co., March, April, and June (N). GEORGIA, Baker Co., March (A); Cherokee Co., June and August (A); Decatur Co., March and April (N), June (A); Walton Co., June (A). MISSISSIPPI, Itawamba Co., July (A); Lowndes Co., June (A); Monroe Co., July (A); Pike Co., June (A). SOUTH CAROLINA, Oconee Co., August (A).

Isonychia rufa McDunnough

Physiographic provinces: CP.

Previously published state records: none.

Additional records: MISSISSIPPI, Lawrence Co., August (A); Pike Co., August (A).

Isonychia sadleri Traver

Physiographic provinces: BR.

Previously published records: N. C., Trv., 1937; Tenn., WB, 1949.

Additional records: NORTH CAROLINA, Watauga Co., June (N). TENNESSEE, Greene Co., March, April (N), May (N,A); Sevier Co., June (A); Unicoi Co., June (A).

Isonychia sayi Burks

Physiographic provinces: CP.

Previously published state records: none.

Additional records: FLORIDA, Okaloosa Co., May (A); Santa Rosa Co., May (A); Walton Co., April (A).

Isonychia serrata Traver

Physiographic provinces: BR, AP.

Previously published state records: N. C., NTH, 1935, H, 1941

Additional records: GEORGIA, Rabun Co., June (A)³. NORTH CAROLINA, Macon Co., August (A). TENNESSEE, Fentress Co., June, July (A).

Isonychia sicca (Walsh)

Physiographic provinces: VR.

Previously published state records: none.

Additional records: GEORGIA, Whitfield Co., August (A)³.

Isonychia similis Traver

Physiographic provinces: P.

Previously published state records: N. C. and S. C., NTH, 1935; N. C., H, 1941

Additional records: SOUTH CAROLINA, Greenville Co., no date (A)*.

Isonychia species

Physiographic provinces: CP, P, BR, VR, AP, ILP.

Records: ALABAMA, Dallas Co., June (N); DeKalb Co., April, July (N); Escambia Co., April (N); Henry Co., June (N); Randolph Co., June (N); St. Clair Co., July (N). GEORGIA, Baker Co., May, October (N); Baldwin Co., May, July (N)*; Barrow Co., July (N,A); Bartow Co., May (N)*; Bibb Co., June (N)*, July (N); Burke Co., June (N); Calhoun Co., June (A); Carroll Co., March (N); Catoosa Co., May, August (N)*; Chattooga Co., June (N)*; Cherokee Co., June, August (N,A); Clarke Co., April (N)*; Cobb Co., November (A); Dawson Co., June (N,A); Decatur Co., June (N,A), August (N); Early Co., February (N); Effingham Co., July (N); Emmanuel Co., May (N)*; Fannin Co., May, June (N); Floyd Co., June (N); Forsyth Co., June (N); Fulton Co., May, June, July, September (A)*; Gilmer Co., June (N)*; Gordon Co., May, June (A)*; Green Co., August (N); Hall Co., June, July (N)*; Hart Co., September (N); Heard Co., July (N); Jackson Co., July (N); Johnson Co., August (N); Lowndes Co., March (N); Lumpkin Co., April (N), June (A)*, July (A), August (A), September (N)*; Madison Co., July (N); Monroe Co., July (N); Murray Co., August (N); Muscogee Co., April (N)*; Pickens Co., June (N), July (N)*; Rabun Co., July (N); Screven Co., July (N); Stephens Co., July (A)*; Towns Co., May (N)*; Troup Co., July (N); Union Co., July (N)*; Walker Co., April, July (N); Walton Co., June (N)*; White Co., June, July, August (N)*; Wilkes Co., July (N); Worth Co., November (N). LOUISIANA, Natchitoches Par., June (A); Red River Par., June (A); Tangipahoa Par., August (N); Vernon Par., June (N). MISSISSIPPI, Harrison Co., August (N); Lamar Co., August (N); Marion Co., August (N). NORTH CAROLINA, Ashe Co., July (N,A); Avery Co., February, August (N); Caldwell Co., July, August (N); Caswell Co., July (N); Davidson Co., July (N); Forsyth Co., June (N); Graham Co., August (N); Haywood Co., August (A); Henderson Co., June (N); Jackson Co., July, August (N); McDowell Co., April (N); Macon Co., June, July, August (N,A); Polk Co., July (N); Randolph Co., July (N); Swain Co., April, May, June, July, August (N); Transylvania Co., May, June, July (N), August (N,A); Union Co., July (N); Wake Co., February, May, December (N); Watauga Co., February, June, August (N), July (A); Wilkes Co., June (N); Yadkin Co., July (N). SOUTH CAROLINA, Aiken Co., July (N); Anderson Co., July (A); Edgefield Co., July (N); Fairfield Co., April (N); Greenville Co., July (N), August (N,A); Lancaster Co., June (N); Laurens Co., April (N); Newberry Co., April (N); McCormick Co., July (N); Oconee Co., August (N); Pickens Co., August (N). TENNESSEE, Blount Co., April, June (N); Franklin Co., April (N); Greene Co., May (N,A); Hamilton Co., May, December (N); Henderson Co., June (N); Lincoln Co., July (N); Morgan Co., July (N); Robertson Co., June (N); Rutherford Co., July (N); Sevier Co., April-August, December (N); Sumner Co., June (N).

Isonychia thalia Traver

Physiographic provinces: P, BR.

Previously published state records: N. C., NTH, 1935, H, 1941

Additional records: GEORGIA, Rabun Co., July (A)*; NORTH CAROLINA, Rockingham Co., July (N,A); South Carolina, Oconee Co., July (A).

Isonychia tuscalanensis Berner

Physiographic provinces: BR.

Previously published state records: Tenn., WB., 1949.

Additional records: none.

FAMILY METRETOPODIDAE
SUBFAMILY METRETOPODINAE
GENUS *Siphloplecton* CLEMENS

Siphloplecton basale (Walker)

Physiographic provinces: CP

Previously published state records: N.C., NTH, 1935

Additional records: SOUTH CAROLINA, Barnwell Co., April (A)⁴

Siphloplecton signatum Traver

Physiographic provinces: BR

Previously published state records: N. C., NTH, 1935

Additional records: GEORGIA, Rabun Co., April (A)³

Siphloplecton species

Physiographic provinces: CP

Additional records: FLORIDA, Okaloosa Co., May (A). GEORGIA, Lowndes Co., March (N,A)

Siphloplecton speciosum Traver

Physiographic provinces: CP, P.

Previously published state records: Fla., Ber., 1950 and 1958, PJ, 1973, Sch, 1967; Ga., NTH, 1935.

Additional records: ALABAMA, Baldwin Co., December (N). FLORIDA, Escambia Co., January (N); Gadsden Co., April (A). GEORGIA, Bibb Co., April (A)³; Fayette Co., March (A)¹; Lowndes Co., March (N,A).

FAMILY BAETIDAE
SUBFAMILY BAETINAE
GENUS *Baetis* LEACH

Baetis amplus (Traver)

Physiographic provinces: CP, P, BR, VR, AP.

Previously published state records: N. C., Trav., 1932 and 1937.

Additional records: ALABAMA, Bibb Co., June (N). GEORGIA, Dougherty Co., September (N)²; Lumpkin Co., August (N); Rabun Co., May (N). MISSISSIPPI, Lauderdale Co., June (N). NORTH CAROLINA, Clay Co., April (N). TENNESSEE, Cumberland Co., April (N,A); Marion Co., April (N).

Baetis australis Traver

Physiographic provinces: CP, P, AP.

Previously published state records: Ala., Ber., 1958; Fla., Ber., 1950 and 1958, PJ, 1973, Sch, 1967; Ga., NTH, 1935, Ber., 1958; La., Bick, 1953; N. C., Trav., 1932.

Additional records: ALABAMA, Baldwin Co., June (N); Blount Co., June (N); Escambia Co., April (N); Houston Co., February (N); Mobile Co., June (N). FLORIDA, Alachua Co., December (A); Columbia Co., November (N); Gulf Co., April (A); Hamilton Co., February (N); Levy Co., November (N); Madison Co., March (N); Walton Co., April (N), April (A). GEORGIA, Early Co., February (N); Peach Co., April (N). LOUISIANA, Tangipahoa Par., June (N). MISSISSIPPI, Stone Co., August (N). NORTH CAROLINA, Rockingham Co., July (N). SOUTH CAROLINA, Aiken Co., May (A)², July (A)².

Baetis cingulatus McDunnough

Physiographic provinces: BR.

Previously published state records: N. C., Trav., 1937.

Additional records: NORTH CAROLINA, Jackson Co., August (A); Macon Co., August, September (A); Swain Co., June (A).

Baetis ephippiatus Traver

Physiographic provinces: CP, P, VR, AP.

Previously published state records: Fla., Ber., 1950 and 1958, PJ, 1973, Sch, 1967; Ga., NTH, 1935, Ber., 1958.

Additional records: ALABAMA, Baldwin Co., June (N); Coosa Co., June (N); Escambia Co., June (N); Macon Co., June (N); Mobile Co., June (N,A); Perry Co., June (N); Walker Co., June (N,A); Washington Co., May (N,A), August (N); Winston Co., August (N). FLORIDA, Bay Co., April (N); Escambia Co., October (N); Santa Rosa Co., August (N). GEORGIA, Baker Co., May (N); Floyd Co., June (A)³, August (A)³; Muscogee Co., June, July (A). LOUISIANA, Tangipahoa Par., August (N). MISSISSIPPI, Amite Co., June (N); Calhoun Co., July (N); Clay Co., July (N); Copiah Co., August (N); Holmes Co., July (N); Lamar Co., May (N), August (N,A); Lawrence Co., August (N); Marion Co., May (A), August (N); Monroe Co., July (N); Pike Co., June (A), August (N); Smith Co., August (N); Sunflower Co., July (N). SOUTH CAROLINA, Aiken Co., July (N); Darlington Co., July (A).

Baetis flavistriata McDunnough

Physiographic provinces: BR.

Previously published state records: Tenn., WB, 1949.

Additional records: NORTH CAROLINA, Macon Co., August (A). TENNESSEE, Greene Co., May (A); Sevier Co., July (A).

Baetis frondalis McDunnough

Physiographic provinces: BR.

Previously published state records: Tenn., WB, 1949.

Additional records: Greene Co., April, May, September (A).

Baetis hageni Eaton

Physiographic provinces: BR, VR, AP.

Previously published state records: Tenn., WB, 1949 (listed as *B. parvus*)

Additional records: TENNESSEE, Claiborne Co., August (N); Cumberland Co., July (A); Greene Co., September (A).

Baetis harti McDunnough

Physiographic provinces: CP.

Previously published state records: none.

Additional records: TENNESSEE, Benton Co., June (A).

Baetis incertans McDunnough

Physiographic provinces: BR, VR.

Previously published state records: N. C., Trav., 1937; Tenn., WB, 1949.

Additional records: TENNESSEE, Claiborne Co., July (N,A); Greene Co., March, April (A); Sevier Co., August (N), October (A); Unicoi Co., August (A).

Baetis intercalaris McDunnough

Physiographic provinces: CP, P, VR, AP, ILP.

Previously published records: Ala., Ber., 1958; Fla., Ber., 1950, 1958, PJ, 1973, Sch, 1967; Ga., Ber., 1958.

Additional records: ALABAMA, Bibb Co., June (N,A); Blount Co., June (A); Chilton Co., June (N); Coosa Co., June (N); Covington Co., July (N); Dale Co., June (N); Dallas Co., April (A), June (N); Elmore Co., June (N,A); Houston Co., June (N); Lauderdale Co., June (A); Macon Co., April, June (N); Shelby Co., June (N); Tuscaloosa Co., June (N). FLORIDA, Escambia Co., October (N,A); Gadsden Co., April (N); Liberty Co., March, June (N). GEORGIA, Baker Co., November (N); Bibb Co., July (N); Cherokee Co., August (A); Decatur Co., March (N); Grady Co., November (N); Muscogee Co., June, July (A). LOUISIANA, Tangipahoa Co., August (N). MISSISSIPPI, Jasper Co., April (N); Lafayette Co., July (N); Lauderdale Co., July (N,A); Perry Co., August (N). NORTH CAROLINA, Macon Co., August (A). TENNESSEE, Campbell Co., August (A); Davidson Co., October (N).

Baetis levitans McDunnough

Physiographic provinces: BR.

Previously published state records: Tenn., WB, 1949.

Additional records: TENNESSEE, Greene Co., May, September (A).

Baetis pallidulus McDunnough

Physiographic provinces: BR.

Previously published state records: none.

Additional records: TENNESSEE, Sevier Co., July (A).

Baetis propinquus (Walsh)

Physiographic provinces: CP, VR.

Previously published state records: Ala., Trav., 1937; Fla., Ber., 1950 and 1958, Sch, 1967.

Additional records: ALABAMA, Dallas Co., June (A); FLORIDA, Gadsden Co., June (A); MISSISSIPPI, Leflore Co., July (A); Lowndes Co., June (A); SOUTH CAROLINA, Darlington Co., July (A); TENNESSEE, Hamilton Co., August (A).

Baetis pygmaeus (Hagen) group

Physiographic provinces: BR, VR, AP.

Previously published state records: none

Additional records: NORTH CAROLINA, Jackson Co., August (N); Macon Co., August (N); Swain Co., April (N); TENNESSEE, Claiborne Co., August (N); Greene Co., March, April (N); Morgan Co., July (N); Van Buren Co., July (N).

Baetis species

Physiographic provinces: CP, P, BR, VR, AP, ILP.

Additional records: ALABAMA, DeKalb Co., April, May, July (N); Tuscaloosa Co., April-July (N); GEORGIA, Baker Co., October (N); Burke Co., June (N); Carroll Co., March (N); Cherokee Co., June (N,A), July, October (N), August (N,A); Coweta Co., June (A); Dawson Co., June (N); Decatur Co., March, August, October (N), June (A); Floyd Co., June (N); Forsyth Co., June (N); Habersham Co., April (A); Hart Co., November (N); Lumpkin Co., April, August (N); Monroe Co., July (N); Muscogee Co., June (N); Peach Co., April (N); Pickens Co., June (N); Rabun Co., April, July, August (N); Toombs Co., August (N); Walker Co., April (N); White Co., August (A); Wilkes Co., (N); MISSISSIPPI, Harrison Co., August (N); Lauderdale Co., July (N,A); Marion Co., August (A); Perry Co., August (N); NORTH CAROLINA, Avery Co., April (N); Buncombe Co., May (N); Clay Co., April (N); Jackson Co., June (N,A), August (N); Macon Co., May (N); July, August (N); Swain Co., April-July (N); Transylvania Co., March, July (N); Wake Co., February, May (N); Yancey Co., May, July, August (N); TENNESSEE, Blount Co., April (N); Franklin Co., April (N); Greene Co., May (A), August (N); Hamilton Co., May, December (N); Henderson Co., June (N); Lincoln Co., July (N); Morgan Co., July (N); Robertson Co., June (N); Rutherford Co., July (N); Sevier Co., May, June, December (N); Sumner Co., June (N); Van Buren Co., July (N).

Baetis sphaerica Berner

Physiographic provinces: CP, P, VR, AP.

Previously published state records: Fla., Ber., 1950 and 1958, PJ, 1973, Sch, 1967; Ga., Ber., 1958.

Additional records: ALABAMA, Baldwin Co., June (N); Bibb Co., June (N); Conecuh Co., June (N); Dallas Co., June (N); Escambia Co., April, June (N); Mobile Co., June (N,A); Tuscaloosa Co., June (N); Walker Co., June (N,A); FLORIDA, Alachua Co., February (A); Baker Co., February (N); Clay Co., January (N); Columbia Co., November (A); Escambia Co., October (N); Hamilton Co., March (N); Hernando Co., February (A); Jackson Co., April (A); Liberty Co., March (A); Madison Co., January (N); Walton Co., April (N); GEORGIA, Baker Co., May (N), October (N); Charlton Co., February (N); Decatur Co., June (N); Early Co., February (N); Grady Co., November (N); Lowndes Co., March (N,A); Macon Co., November (N); Peach Co., April (N,A); Worth Co., November (N); LOUISIANA, St. Tammany Par., November (N); Tangipahoa Par., June (N); MISSISSIPPI, Amite Co., June (N); Harrison Co., December (N); Jasper Co., April (N); Lafayette Co., July (N,A); Lamar Co., May (N); Marion Co., August (N); Perry Co., August (N); Pike Co., August (N); Stone Co., August (N); SOUTH CAROLINA, Aiken Co., July (N); Lexington Co., April (N); Orangeburg Co., October (N).

Baetis spinosus McDunnough

Physiographic provinces: CP, P, BR, VR, AP.

Previously published state records: Ala., Ber., 1958; Fla., Ber., 1950 and 1958, PJ, 1973, Sch, 1967; Ga., NTH, 1935, Ber., 1958.

Additional records: ALABAMA, Baldwin Co., June (N); Bibb Co., June (N); Chilton Co., June (N); Coosa Co., June (N); Covington Co., July (N); Dale Co., June (N); Dallas Co., June (N); Elmore Co., June (N); Escambia Co., April (A), June (N); Henry Co., June (N,A); Houston Co., June (N); Macon Co., April (N); Marion Co., June (N); Mobile Co., June (N,A); Pike Co., June (N); Randolph Co., June (N); Sumter Co., April (N); Tuscaloosa Co., June (N); Washington Co., June (N). FLORIDA, Alachua Co., January, December (A), October (N); Baker Co., February (N); Columbia Co., November (A); Escambia Co., October (N); Gadsden Co., April (N), June (A); Hamilton Co., November (N); Levy Co., November (N); Liberty Co., March (N,A); Madison Co., January (N); Walton Co., April (N). GEORGIA, Barrow Co., July (N); Berrian Co., March (N); Bibb Co., July (N); Burke Co., August (N); Charlton Co., February (N); Cherokee Co., June (N,A); Decatur Co., March, June (N); Dougherty Co., November (N); Early Co., February (N); Fulton Co., June (A)²; Lowndes Co., March (N); Macon Co., April (N); Muscogee Co., June (N); Worth Co., November (N). LOUISIANA, Tangipahoa Par., August (N). MISSISSIPPI, Claiborne Co., April (N); Jasper Co., April (N); Lafayette Co., July (N); Marshall Co., July (N); Monroe Co., July (N); Perry Co., August (N); Rankin Co., April (N). SOUTH CAROLINA, Aiken Co., May (A)²; Allendale Co., May (N)²; Edgefield Co., April (N); Lancaster Co., June (N); Lexington Co., April (N); Orangeburg Co., April (A); Pickens Co., August (N).

Baetis vagans McDunnough

Physiographic provinces: BR.

Previously published state records: none.

Additional records: NORTH CAROLINA, Jackson Co., August (A); Macon Co., August (A).

GENUS *Callibaetis* EATON*Callibaetis floridanus* Banks

Physiographic provinces: CP.

Previously published state records: Ala., Ber., 1958; Fla., Banks, 1900, Ber., 1950 and 1958, Sch, 1967; Ga., Ber. 1958.

Additional records: ALABAMA, Houston Co., June (N,A). FLORIDA, Alachua Co., January (A), May (A), June (A), August (A), October (A); Broward Co., November (A); Collier Co., April (A), September (A); Dade Co., June (A); Hernando Co., February (A); Indian River Co., April (A); Jackson Co., April (A); Monroe Co., February (A), March (A), October (A); December (A); Polk Co., April (A); St. Lucie Co., October (A). GEORGIA, Decatur Co., April (N), August (A)²; Thomas Co., May (N). LOUISIANA, East Baton Rouge Par., June (A); Natchitoches Par., July (A); Orleans Par., January, December (A); Plaquemines Par., December (A); St. Tammany Par., January (A). MISSISSIPPI, Sunflower Co., July (A); Tallahatchee Co., July (A).

Callibaetis fluctuans (Walsh)

Physiographic provinces: CP.

Previously published state records: None

Additional records: LOUISIANA, Lafayette Co., February, July (A).

Callibaetis pretiosus Banks

Physiographic provinces: CP.

Previously published state records: Fla., Ber., 1950, PJ, 1973.

Additional records: ALABAMA, Baldwin Co., June (N). FLORIDA, Alachua Co., April (A); Brevard Co., March (A); Collier Co., April (A); Hernando Co., February (A); Highlands Co., May (A); Lee Co., September (A); Leon Co., April (A); Monroe Co., January (A); Polk Co., February (A), April (A); Seminole Co., February (N,A). GEORGIA, Berrian Co., March (N); Echols Co., February (N); Lowndes Co., October (N); Seminole Co., June (N). NORTH CAROLINA, Wayne Co., September (A). TENNESSEE, Shelby Co., June (A).

Callibaetis species

Physiographic provinces: CP, P, BR, VR, ILP.

Additional records: ALABAMA, Baldwin Co., December (N); Bibb Co., June (N,A); Houston Co., June (A); Macon Co., June (N); Mobile Co., June (N); Pike Co., June (N); Shelby Co., June (N). GEORGIA, Burke Co., August (N); Calhoun Co., July (N); Camden Co., September (N); Clayton Co., September (A)³; Decatur Co., March (A); Johnson Co., August (N); Lowndes Co., February (A), March (A); Richmond Co., July (A); Thomas Co., June (N). LOUISIANA, Acadia Par., April (N); Ascension Par., December (N); East Feliciana Par., January (N); Lafayette Par., May (N); Natchitoches, April, June, July (A); Orleans Par., June (N). NORTH CAROLINA, Henderson Co., July (N); Macon Co., June (A), July (N,A), August (A); Transylvania Co., May (N). SOUTH CAROLINA, Aiken Co., May, June, July (A)²; Marlboro Co., July (N). TENNESSEE, Davidson Co., June (N); Greene Co., March (N); Humphreys Co., July (N); Williamson Co., May (N).

GENUS *Centroptilum* EATON*Centroptilum fragile* McDunnough

Physiographic provinces: BR.

Previously published state records: None

Additional records: NORTH CAROLINA, Jackson Co., August (A).

Centroptilum hobbsi Berner

Physiographic provinces: CP, VR, AP.

Previously published state records: Ala., Ber., 1958; Fla., Ber., 1950 and 1958, Sch, 1967; Ga., Ber., 1958.

Additional records: ALABAMA, Barbour Co., June (N); Bibb Co., June (N); Coosa Co., June (N); Macon Co., June (N); Perry Co., June (A); Walker Co., June (A). FLORIDA, Escambia Co., August (A); Liberty Co., June (A); Santa Rosa Co., August (N,A). GEORGIA, Baker Co., May (N), November (N). MISSISSIPPI, Copiah Co., August (N); Lamar Co., August (A).

Centroptilum intermediale McDunnough

Physiographic provinces: P, BR.

Previously published state records: None

Additional records: GEORGIA, Cherokee Co., June (N,A). NORTH CAROLINA, Haywood Co., July (A); Macon Co., September (A).

Centroptilum simile McDunnough

Physiographic provinces: BR.

Previously published state records: None.

Additional records: NORTH CAROLINA, Swain Co., June (A).

Centroptilum species

Physiographic provinces: CP, P, BR, VR, AP, ILP.

Additional records: ALABAMA, Calhoun Co., July (A); DeKalb Co., May (N), July (N). FLORIDA, Okaloosa Co., May (A). GEORGIA, Cherokee Co., June (N), August (A); Dawson Co., June (N); Johnson Co., August (N); Monroe Co., July (N); Towns Co., June (A)³. LOUISIANA, Tangipahoa Par., October (N). MISSISSIPPI, Forrest Co., August 22, 1954 (A); Lamar Co., May (N), August (A); Marion Co., August (N). NORTH CAROLINA, Caldwell Co., July (A); Cumberland Co., July (A); Graham Co., August (N); Granville Co., July (A); Jackson Co., August (N,A); Macon Co., June (A), August (N,A); Person Co., July (N,A); Robson Co., August (A); Swain Co., August (N). SOUTH CAROLINA, Aiken Co., July (A); Edgefield Co., April (N); Lexington Co., April (N); Oconee Co., August (N). TENNESSEE, Benton Co., June (A); Cooke Co., June (A); Cumberland Co., July (N); Greene Co., May (A); Hamilton Co., August (A); Houston Co., June (N); Lincoln Co., July (N); Robertson Co., June (N); Sevier Co., August (N,A).

Centroptilum viridocularis Berner

Physiographic provinces: CP, P, VR.

Previously published state records: Fla., Ber., 1950 and 1958; PJ, 1973; Sch, 1967; Ga., Ber., 1958.

Additional records: ALABAMA, Baldwin Co., June (N); Bibb Co., June (N); Elmore Co., June (N); Macon Co., June (N). FLORIDA, Alachua Co., June (A); Escambia Co., October (N); Liberty Co., June (N); Polk Co., January-April (A), June-August (A), October (A), May-August (N). GEORGIA, Decatur Co., June (A). MISSISSIPPI, Claiborne Co., April (N).

GENUS *Cloeon* LEACH

Cloeon alamance (Traver)

Physiographic provinces: BR, AP.

Previously published state records: Ga., NTH, 1935; N. C., Trav., 1932; Tenn., WB, 1949 (as *Neocloeon alamance*).

Additional records: NORTH CAROLINA, Macon Co., July and August (N,A); Swain Co., June (A), August (A). TENNESSEE, Cumberland Co., April (N); Greene Co., March (N); Sevier Co., May (A).

Cloeon rubropictum McDunnough

Physiographic provinces: CP, VR.

Previously published state records: Fla., Ber., 1950; PJ, 1973; Sch, 1967.

Additional records: ALABAMA, Covington Co., July (N); Dallas Co., June (N); Macon Co., June (N); Shelby Co., June (N). GEORGIA, Baker Co., May (N); Early Co., February (N). MISSISSIPPI, Claiborne Co., April (A).

Cloeon simplex McDunnough

Physiographic provinces: CP

Previously published state records: None.

Additional records: LOUISIANA, East Baton Rouge Par., June (A).

Cloeon species

Physiographic provinces: CP, P, BR, VR, AP, ILP

Additional records: ALABAMA, Baldwin Co., June (N); Bibb Co., June (N); Calhoun Co., July (A); Covington Co., July (N); Cullman Co., June (N); Dallas Co., June (A); DeKalb Co., July (N); Elmore Co., June (N); Houston Co., February (N); Lauderdale Co., June (N); Macon Co., April (N); Perry Co., June (A); Randolph Co., June (N); St. Clair Co., June (N). GEORGIA, Bibb Co., (N); Early Co., February (N); Floyd Co., June (A); Muscogee Co., June (N); Richmond Co., July (A). LOUISIANA, Washington Co., August (N). MISSISSIPPI, Forrest Co., August (N,A); Harrison Co., August (N); Lafayette Co., July (N); Lamar Co., August (A). NORTH CAROLINA, Cabarrus Co., July (N,A); Davidson Co., (N); Graham Co., August (N); Jackson Co., June (A), August (N,A), September (A); Lincoln Co., July (N); Macon Co., June (A), July-August (A), August (N); Person Co., July (N,A); Randolph Co., July (N); Swain Co., August (A); Union Co., July (A). SOUTH CAROLINA, Edgefield Co., April (N); Fairfield Co., April (N); Laurens Co., April (N,A). TENNESSEE, Benton Co., June (N,A); Fentress Co., May (A); Greene Co., April (A), May (N,A); Lincoln Co., April (N); Morgan Co., July (N,A); Polk Co., August (A); Robertson Co., June (N); Sevier Co., July (A); Van Buren Co., July (N).

GENUS *Heterocloeon* McDUNNOUGH

Heterocloeon berneri (Müller-Liebenau)

Physiographic provinces: P

Previously published state records: Ga., M.-L., 1974.

Additional records: None.

Heterocloeon curiosum (McDunnough)

Physiographic provinces: CP, P, BR.

Previously published state records: Ga., M.-L., 1974 (as *Rheobaetis traverae*); N. C., Ber., 1949.

Additional records: GEORGIA, Baker Co., (N); Cherokee Co., June (N). NORTH CAROLINA, Macon Co., July (A), August (N,A). SOUTH CAROLINA, Spartanburg Co., August (N).

Heterocloeon petersi (Müller-Liebenau)

Physiographic provinces: P

Previously published state records: Ga., M.-L., 1974.

Additional records: None.

GENUS *Paracloeodes* DAY

Paracloeodes species

Physiographic provinces: CP, P, VR, AP.

Previously published state records: None.

Additional records: ALABAMA, Bibb Co., June (N); Coosa Co., June (N); DeKalb Co., July (N); Perry Co., June (N). GEORGIA, Bibb Co., July (N,A); Monroe Co., July (N). MISSISSIPPI, Calhoun Co., July (N); Copiah Co., August (N); Franklin Co., June, August (N); Smith Co., August (N).

GENUS *Pseudocloeon* Klapalek

Pseudocloeon alachua Berner

Physiographic provinces: CP.

Previously published state records: Fla., Ber., 1950, Sch, 1967.

Additional records: FLORIDA, Levy Co., November (N). MISSISSIPPI, Lowndes Co., June (A).

Pseudocloeon bimaculatum Berner

Physiographic provinces: CP, P.

Previously published state records: Fla., Ber., 1950, Sch, 1967.

Additional records: ALABAMA, Baldwin Co., June (N); Escambia Co., June (N,A); Macon Co., June (A); Mobile Co., April (N), June (N,A). FLORIDA, Santa Rosa Co., August (N). GEORGIA, Cherokee Co., June (N); Early Co., February (N); Monroe Co., July (N); Muscogee Co., June (A); Peach Co., April (N). MISSISSIPPI, Lawrence Co., August (N); Perry Co., August (N); Stone Co., August (N); Sunflower Co., July (N,A). SOUTH CAROLINA, Edgefield Co., April (N); Lexington Co., April (N).

Pseudocloeon carolina (Banks)

Physiographic provinces: P, BR, VR, AP, ILP.

Previously published state records: N. C., Banks, 1924, NTH, 1935, Trav., 1937, H, 1941.

Additional records: ALABAMA, Bibb Co., June (N); Blount Co., June (N); Coosa Co., June (N); Lauderdale Co., June (N); Walker Co., June (N). GEORGIA, Lumpkin Co., April (A)¹; Rabun Co., May (N); Walker Co., April (N). NORTH CAROLINA, Jackson Co., June (N); Macon Co., August (N,A); Person Co., July (N); Polk Co., July (N); Swain Co., April (A), June (N,A), July (A), July (N), August (N). TENNESSEE, Blount Co., June and December (N); Robertson Co., June (N); Sevier Co., May, August, October (N).

Pseudocloeon cingulatum McDunnough

Physiographic provinces: BR, ILP.

Previously published state records: None

Additional records: NORTH CAROLINA, Jackson Co., August (A). TENNESSEE, Lincoln Co., July (A).

Pseudocloeon dubium (Walsh)

Physiographic provinces: CP, BR, VR, AP.

Previously published state records: Ala., Trav., 1937; N. C., NTH 1935, Trav., 1937.

Additional records: ALABAMA, Bibb Co., June (N); Covington Co., July (N); Marion Co., June (N); Perry Co., June (N). GEORGIA, Habersham Co., April (A)¹. NORTH CAROLINA, Jackson Co., August (A); McDowell Co., April (N,A).

Pseudocloeon etowah Traver

Physiographic provinces: VR

Previously published state records: Ga., NTH, 1935.

Additional records: GEORGIA, Catoosa Co., May (A)²; Floyd Co., June (A).*Pseudocloeon futile* McDunnough

Physiographic provinces: CP.

Previously published state records: None.

Additional records: MISSISSIPPI, Lamar Co., August (A).

Pseudocloeon parvulum McDunnough

Physiographic provinces: CP, P, BR, VR.

Previously published state records: Fla., Ber., 1950 and 1958, Sch, 1967.

Additional records: ALABAMA, Bibb Co., May (N); Coosa Co., June (N); Macon Co., April (N). GEORGIA; Richmond Co., August (A). MISSISSIPPI, Amite Co., June (N); Claiborne Co., April (N); Copiah Co., August (N); Jasper Co., April (N). SOUTH CAROLINA, Edgefield Co., April (N); Fairfield Co., April (N); Greenville Co., August (N); Laurens Co., April (N); Newberry Co., April (N).

Pseudocloeon punctiventris McDunnough

Physiographic provinces: CP, P, BR, VR

Previously published state records: Fla., Ber., 1950 and 1958, PJ, 1973, Sch, 1967; Ga., Ber., 1958.

Additional records: ALABAMA, Blount Co., June (N); Coosa Co., June (N); Dekalb Co., April (N); Macon Co., April (N); Marion Co., June (N); Sumter Co., April (N); Walker Co., June (N,A). FLORIDA, Clay Co., January (N); Madison Co., January (N). GEORGIA, Baker Co., May (N), November (N,A); Berrian Co., March (N); Chattahoochee Co., April (N); Cherokee Co., June (N,A); Jones Co., April (N); Lowndes Co., March (N); Lumpkin Co., August (N,A); Muscogee Co., June (N). MISSISSIPPI, Monroe Co., July (N,A). NORTH CAROLINA, Forsyth Co., June (N); Person Co., July (N). SOUTH CAROLINA, Edgefield Co., July (N); Greenville Co., August (N); Orangeburg Co., April (A); Richland Co., July (A). TENNESSEE, Sevier Co., August (A).

Pseudocloeon rubrolaterale McDunnough

Physiographic provinces: BR.

Previously published state records: None.

Additional records: TENNESSEE, Sevier Co., July (A), August (A).

Pseudocloeon species

Physiographic provinces: CP, P, BR, VR, AP.

Additional records: ALABAMA, Dekalb Co., May (N). FLORIDA, Okaloosa Co., May (A). GEORGIA, Burke Co., June (N); Cherokee Co., June (N,A), July and August (N); Dawson Co., June (N,A); Fulton Co., April (N); Lowndes Co., March (A); Lumpkin Co., April (N); Rabun Co., August (N); Richmond Co., April (A). LOUISIANA, Natchitoches Par., March (N). MISSISSIPPI, Lamar Co., May (N); Marion Co., August (A). NORTH CAROLINA, Buncombe Co., May (N); Caldwell Co., July (N); Clay Co., April (N); Davidson Co., July (N); Graham Co., August (N,A); Jackson Co., June (A), August (N); Macon Co., June and July (A), August and September (N,A); Orange Co., February (N); Person Co., July (A); Polk Co., July (N); Randolph Co., July (N); Swain Co., May (N), June and July (N,A), August (A); Transylvania Co., March, June, July and August (N); Wake Co., February and May (N); Yadkin Co., February and July (N). SOUTH CAROLINA, Aiken Co., May-August (A)², July (N); Edgefield Co., April (N,A); Fairfield Co., April (N); Greenville Co., August (N); Greenwood Co., April (A); Laurens Co., April (N); Ocoee Co., August (N,A); Orangeburg Co., April (A), October (N). TENNESSEE, Hamilton Co., May (N); Morgan Co., July (N); Sevier Co., April-June (N); Van Buren Co., July (N).

**FAMILY OLIGONEURIIDAE
SUBFAMILY OLIGONEURIINAE
GENUS *Homoeoneuria* EATON**

Homoeoneuria dolani Edmunds, Berner, and Traver

Physiographic provinces: CP.

Previously published state records: Fla., PJ, 1973; Ga., EBT, 1958; S. C., EBT, 1958.

Additional records: None.

Homoeoneuria species

Physiographic provinces: CP, P.

Previously published state records: Fla., EBT, 1958; Miss., EBT, 1958; S. C., EBT, 1958.

Additional records: FLORIDA, Santa Rosa Co., August (N).

**FAMILY HEPTAGENIIDAE
SUBFAMILY PSEUDIRONINAE
GENUS *Pseudiron* McDUNNOUGH**

Pseudiron centralis McDunnough

Physiographic provinces: CP

Previously published state records: None

Additional records: ALABAMA, Dallas Co., April (A). FLORIDA, Walton Co., April (A). TENNESSEE, Shelby Co., June (A).

Pseudiron meridionalis Traver

Physiographic provinces: CP, P.

Previously published state records: Fla., PJ, 1973; Ga., NTH, 1935.

Additional records: None

Pseudiron species

Physiographic provinces: CP, BR

Additional records: FLORIDA, Santa Rosa Co., March (N). MISSISSIPPI, Leflore Co., June (A).

SOUTH CAROLINA, Allendale Co., May (N)⁴. TENNESSEE, Unicoi Co., May (A).

**SUBFAMILY HEPTAGENIINAE
GENUS *Cinygmulia* McDUNNOUGH**

Cinygmulia species

Physiographic provinces: BR.

Additional records: NORTH CAROLINA, Clay Co., April (N); Macon Co., May (N)¹; Swain Co., May (N)¹, April and May (N).

Cinygmulia subaequalis (Banks)

Physiographic provinces: BR, AP, ILP.

Previously published state records: N. C., Banks, 1914, Trav., 1937; Tenn., WB, 1949 (Last two as *C. atlantica*).

Additional records: GEORGIA, Rabun Co., July (A)². NORTH CAROLINA, Clay Co., April (N); McDowell Co., April (N); Swain Co., June (A). TENNESSEE, Cocke Co., April (A); Dickson Co., June (N); Houston Co., June (N); Marion Co., April (N); Moore Co., April (N).

GENUS *Epeorus* EATON

Epeorus dispar (Traver)

Physiographic provinces: BR.

Previously published state records: N. C., Trav., 1933 and 1937; H, 1941; S. C., NTH, 1935.

Additional records: NORTH CAROLINA, Jackson Co., August (A,N); Macon Co., August (A). SOUTH CAROLINA, Greenville Co., July (A)¹, June (A)¹. TENNESSEE, Unicoi Co., August, October (A).

Epeorus pleuralis (Banks)

Physiographic provinces: BR

Previously published state records: N. C., Trav., 1937 (as *E. confusus*)

Additional records: GEORGIA, Rabun Co., May (A)³. TENNESSEE, Sevier Co., July (A,N), April, May (A)³; Unicoi Co., June (A).

Epeorus rubidus (Traver)

Physiographic provinces: BR, VR.

Previously published state records: N. C., Trav., 1933 and 1937 H, 1941; Tenn., WB, 1949.

Additional records: GEORGIA, Lumpkin Co., August (A)¹. NORTH CAROLINA, Jackson Co., June (N,A). SOUTH CAROLINA, Pickens Co., May (A)¹. TENNESSEE, Cocke Co., June (A); Greene Co., May (N); Hawkins Co., July (N).

Epeorus species

Physiographic provinces: CP, P, BR, VR.

Additional records: ALABAMA, Calhoun Co., July (N). GEORGIA, Burke Co., June (N); Carroll Co., March (N); Cherokee Co., June (N); Dawson Co., June (N,A); Fannin Co., May (N)³; Habersham Co., April (A)¹; Lumpkin Co., August (N), April (N); Pickens Co., June (N); Rabun Co., May (N)³, April (N); August (N); White Co., June, July (N)³. NORTH CAROLINA, Avery Co., February, April (N); Buncombe Co., May (N); Clay Co., April (N); Macon Co., July, August (N); McDowell Co., May, August (N); Swain Co., June, July, December (N); Transylvania Co., March, May, July (N); Watauga Co., February (N); Yancey Co., May, June, July (N). SOUTH CAROLINA, Aiken Co., May (A); Oconee Co., July (A), August (N). TENNESSEE, Blount Co., April, June (N); Greene Co., May (N)¹, August (N); Sevier Co., April (A)¹, April-August, December (N).

Epeorus subpallidus (Traver)

Physiographic provinces: BR.

Previously published state records: N. C., Trav., 1937, H, 1941

Additional records: NORTH CAROLINA, Macon Co., August (A). TENNESSEE, Sevier Co., June (A).

GENUS *Heptagenia* WALSH

Heptagenia aphrodite McDunnough

Physiographic provinces: P, BR, VR, AP, ILP.

Previously published state records: Ga., NTH, 1935; N.C., NTH, 1935, Trav., 1937, H, 1941.

Additional records: ALABAMA, Bibb Co., June (N); Coosa Co., June (N); Lauderdale Co., June (A); Walker Co., June (A). GEORGIA, Catoosa, June (A)¹, July (A)³; Floyd Co., June (A)³; Fulton Co., July (A)²; White Co., July (A)³, June, July (A); Whitfield Co., June, July, August, September (A)³. NORTH CAROLINA, Macon Co. September (A). TENNESSEE, Cheatham Co., July (A); Davidson Co., June (A); Dickson Co., July (N,A); Lincoln Co., July (N); Rutherford Co., July (N); Sevier, October (N).

Heptagenia cruentata Walsh

Physiographic provinces: CP.

Previously published state records: None.

Additional records: TENNESSEE, Shelby Co., June (A).

Heptagenia dolosa Traver

Physiographic provinces: CP, P, BR, VR.

Previously published state records: Ga., NTH, 1935.

Additional records: GEORGIA, Bartow Co., August (A)¹; Cherokee Co., June (N,A), August

(A); Cobb Co., July (A); Dougherty Co., June (A)¹; Lumpkin Co., July (A), August (N); Muscogee Co., June, July (A); Pickens Co., June (N); Stephens Co., July (A)¹. NORTH CAROLINA, Forsyth Co., June (N); Randolph Co., July (N). SOUTH CAROLINA, Greenville Co., June (A)¹.

Heptagenia flavescens (Walsh)

Physiographic provinces: CP, P, VR, AP

Previously published state records: Fla., Ber., 1953 and 1958; Sch., 1967; Ga., NTH, 1935, Ber., 1958.

Additional records: ALABAMA, Dallas Co., April (A); Dekalb Co., July (N). FLORIDA, Escambia Co., March, November (N); Walton Co., June (A). GEORGIA, Decatur Co., June (A)²; Floyd Co., June (A); Fulton Co., June (A)³; Richmond Co., April (A). LOUISIANA, East Baton Rouge Co., May (A); Natchitoches Co., May (A), April (A). SOUTH CAROLINA, Orangeburg Co., April (A).

Heptagenia hebe McDunnough

Physiographic provinces: BR, VR, AP, ILP

Previously published state records: Tenn., WB, 1949.

Additional records: ALABAMA, Blount Co., June (N); Cullman Co., June (N); Marion Co., June (N). GEORGIA, Catoosa Co., June (A)^{1,3}; Rabun Co., June (A)³. NORTH CAROLINA, Avery Co., August (A); Jackson Co., August (A); Macon Co., September (A), August (A); Watauga Co., July (N). TENNESSEE, Blount Co., June (A); Cumberland Co., July (N); Grainger Co., July (N,A); Greene Co., May (A); Hamilton Co., July (A); Lincoln Co., July (A); Sevier Co., August, July (A).

Heptagenia julia Traver

Physiographic provinces: P, BR.

Previously published state records: N. C., NTH, 1935, Trav., 1937, H, 1941; S. C. NTH, 1935.

Additional records: GEORGIA, Towns Co., May (A)³; NORTH CAROLINA, Jackson Co., August (A), August (N). SOUTH CAROLINA, Greenville Co., June (A)⁴.

Heptagenia juno McDunnough

Physiographic provinces: P, BR, VR, AP, ILP.

Previously published state records: N. C., Trav., 1937, H, 1941.

Additional records: ALABAMA, Dekalb Co., July (N). GEORGIA, Lumpkin Co., June (A)³. NORTH CAROLINA, Davidson Co., July (N); Jackson Co., June (A); Person Co., July (N). TENNESSEE, Hawkins Co., July (N); Robertson Co., June (N); Sevier Co., October (N), June (A).

Heptagenia maculipennis Walsh

Physiographic provinces: CP, P, VR

Previously published state records: Tenn., NTH, 1935

Additional records: ALABAMA, Bibb Co., May (N); Dallas Co., June (A); Perry Co., June (A). MISSISSIPPI, Lamar Co., August (A); Lawrence Co., August (A); Lowndes Co., June (A); Marion Co., May (A); Pike Co., June (A). SOUTH CAROLINA, Chesterfield Co., July (A).

Heptagenia marginalis Banks

Physiographic provinces: CP, P, BR, VR, AP

Previously published state records: N. C., NTH, 1935, Trav., 1937, H, 1941

Additional records: ALABAMA, Dekalb Co., July (N). GEORGIA, Bartow Co., June (A)¹; Cherokee Co., June (A); Dougherty Co., September (A); Gilmer Co., July (A)³; Habersham Co., June (A)³; Upson Co., June (A)³. NORTH CAROLINA, Davidson Co., July (N); Macon Co., June (A), August (A); Swain Co., August (A). SOUTH CAROLINA, Edgefield Co., July (N); Greenville Co., August (N); Oconee Co., August (N). TENNESSEE, Fentress Co., June (A).

Heptagenia minerva McDunnough

Physiographic provinces: BR.

Previously published state records: Ala., Trav., 1937.

Additional records: TENNESSEE, Sevier Co., July (A).

Heptagenia persimplex McDunnough

Physiographic provinces: CP, P.

Previously published state records: None

Additional records: ALABAMA, Macon Co., June (A). GEORGIA, Cherokee Co., June (A). TENNESSEE, Shelby Co., June (A).

Heptagenia pulla (Clemens)

Physiographic provinces: BR, AP.

Previously published state records: None

Additional records: ALABAMA, Cullman Co., June (N,A). NORTH CAROLINA, Swain Co., August (A); Watauga Co., August (A).

Heptagenia species

Physiographic provinces: CP, P, BR, VR, AP, ILP.

Additional records: ALABAMA, Randolph Co., June (N). FLORIDA, Escambia Co., October (N), March (N). GEORGIA, Burke Co., November, December (N), June (N); Chattooga Co., June (A)³, April (N); Cherokee Co., June (N,A); Cobb Co., August (N), November (N); Dawson Co., June (N); Fulton Co., April (N); Lumpkin Co., July (A)³, April (N); Rabun Co., April (N); Talbot Co., July (A)³; White Co., August (A), July (A). MISSISSIPPI, Forrest Co., August (A), Lamar Co., May (N); Marion Co., August (N). NORTH CAROLINA, Avery Co., February (N); Clay Co., April (N); Jackson Co., August (N,A); Macon Co., June, July (A), August (N); McDowell Co., August (N); Orange Co., May (N); Swain Co., May, June (N). SOUTH CAROLINA, Aiken Co., June (N); Fairfield Co., April (N); Greenville Co., July (A)⁴. TENNESSEE, Blount Co., May (N); Giles Co., July (N); Greene Co., August (N); Hamilton Co., May (N); Robertson Co., July (N); Sevier Co., May, June (N); Sumner Co., June (N); Unicoi Co., September (A).*Heptagenia spinosa* Traver

Physiographic provinces: BR

Previously published state records: N. C., NTH, 1935, Trav. 1937.

Additional records: NORTH CAROLINA, Swain Co., August (A).

Heptagenia thetis Traver

Physiographic provinces: P, BR, VR.

Previously published state records: Ga., Trav., 1937; N. C., NTH, 1935, Trav., 1937, H, 1941.

Additional records: GEORGIA, Coweta Co., June (A)³; Lumpkin Co., June (A)³; Whitfield Co., May (A)³. NORTH CAROLINA, Swain Co., July (N). SOUTH CAROLINA, Oconee Co., August (N). TENNESSEE, Greene Co., August (N).*Heptagenia townesi* Traver

Physiographic provinces: BR.

Previously published state records: S. C., NTH, 1935.

Additional records: GEORGIA, Rabun Co., August (A). NORTH CAROLINA, Jackson Co., August (A), Macon Co., July (A). SOUTH CAROLINA, Greenville Co., June (A)³. TENNESSEE, Sevier Co., July (A).GENUS *Rhithrogena* EATON*Rhithrogena amica* Traver

Physiographic provinces: BR.

Previously published state records: N. C., Trav., 1937.

Additional records: GEORGIA, Towns Co., June (A)³.*Rhithrogena exilis* Traver

Physiographic provinces: BR.

Previously published state records: N. C., NTH, 1935.

Additional records: GEORGIA, Rabun Co., June (A)³. NORTH CAROLINA, Macon Co., August (N); Swain Co., May (N)¹, August (N). TENNESSEE, Blount Co., June (N).

Rhithrogena fasciata Traver

Physiographic provinces: BR.

Previously published state records: N. C., Trav., 1933 and 1937, H, 1941.

Additional records: GEORGIA, Rabun Co., June (A)³; White Co., July, August (A).

Rhithrogena fuscifrons Traver

Physiographic provinces: BR, VR.

Previously published state records: N. C., NTH, 1935, H, 1941.

Additional records: GEORGIA, Fannin Co., July (A)³; NORTH CAROLINA, Jackson Co., June (A).

Rhithrogena pellucida Dwyer

Physiographic provinces: CP.

Previously published state records: None

Additional records: ALABAMA, Perry Co., June (A).

Rhithrogena rubicunda Traver

Physiographic provinces: BR

Previously published state records: N. C., Trav., 1937.

Additional records: NORTH CAROLINA, Jackson Co., August (A).

Rhithrogena species

Physiographic provinces: CP, BR, VR, AP, ILP.

Additional records: ALABAMA, Marion Co., June (N). GEORGIA, Lumpkin Co., April (N); Rabun Co., August (N); Whitfield Co., May (N). MISSISSIPPI, Lamar Co., May (N). NORTH CAROLINA, Jackson Co., August (N); Macon Co., August (N); Swain Co., June (N); Transylvania Co., August (N); Yancey Co., July (N). TENNESSEE, Campbell Co., June (N)⁴; Dickson Co., June (N); Humphreys Co., July (N); Sevier Co., June (N); Wayne Co., July (N).

Rhithrogena uhleri Traver

Physiographic provinces: CP, P, BR.

Previously published state records: N. C., NTH, 1935.

Additional records: ALABAMA, Perry Co., May (N). GEORGIA, Rabun Co., May (A)³. NORTH CAROLINA, Transylvania Co., August (N). SOUTH CAROLINA, Edgefield Co., April (N).

GENUS *Stenacron* JENSEN*Stenacron canadense* (Walker)

Physiographic provinces: BR

Previously published state records: None

Additional records: GEORGIA, Rabun Co., May (A)³.

Stenacron carolina (Banks)

Physiographic provinces: BR

Previously published state records: N. C., Banks, 1914, NTH, 1935, Trav., 1937, H, 1941, L, 1974 a, b; S. C., NTH, 1935 L, 1974b; Tenn.; McD., 1925, NTH, 1935, 1974b.

Additional records: GEORGIA, Rabun Co., May (A)³; White Co., June (A)¹.

Stenacron floridense (Lewis)

Physiographic provinces: CP

Previously published state records: Fla., L, 1974a and 1974b.

Additional records: None.

Stenacron gildersleevei (Traver)

Physiographic provinces: BR

Previously published state records: Tenn., L, 1974b

Additional records: None.

Stenacron heterotarsale (McDunnough)

Physiographic provinces: BR

Previously published state records: N. C., NTH, 1935; Tenn., WB, 1949.

Additional records: ALABAMA, Conecuh Co., June (A); GEORGIA, Cherokee Co., June (A); Fannin Co., May (A)²; Peach Co., April (A); Rabun Co., August (A). NORTH CAROLINA, Macon Co., August (A). SOUTH CAROLINA, Oconee Co., August (A). TENNESSEE, Greene Co., April (N), May (A), September (A); Lincoln Co., July (A); Sevier Co., August (A).

Stenacron interpunctatum (Say)

Physiographic provinces: CP, P, BR, VR, AP, ILP.

Previously published state records: Ala., Trav., 1937; Fla., Ber., 1950 (as *Stenonema proximum*), 1958; PJ, 1973; Sch, 1967, L, 1974b; Ga., NTH, 1935; Ber., 1958; N. C., L, 1974b; Tenn., NTH, 1935.

Additional records: ALABAMA, Baldwin Co., April, June, December (N); Bibb Co., May (N), June (A); Calhoun Co., July (N,A); Cherokee Co., July (N,A); Clay Co., June (N,A); Colbert Co., June (A); Dallas Co., June (N); Dekalb Co., April, May, July (N); Elmore Co., June (N); Escambia Co., June (N,A); Lauderdale Co., June (A), July (N); Mobile Co., June (N,A); St. Clair Co., June (N,A); Tallapoosa Co., June (A); Tuscaloosa Co., April (N), May (N); Walker Co., June (N,A); Winston Co., August (N,A). FLORIDA, Alachua Co., October (A); Baker Co., February (N); Columbia Co., November (A); Gadsden Co., June (A); Hamilton Co., July (A); Hardee Co., June (N); Hernando Co., February (A); Highlands Co., January (A); Jackson Co., April (A); Levy Co., November (N); Santa Rosa Co., August (N); Walton Co., April (N). GEORGIA, Baker Co., May (N,A), November (N); Bartow Co., August (A); Burke Co., September (N), December (N); Catoosa Co., June (A)¹; Cherokee Co., August (A); Cobb Co., August (N); Dawson Co., June (A); Decatur Co., June (A); August (A)¹; Early Co., October (N); Fannin Co., June (A)²; Floyd Co., June (A), June and August (A)², July (A)¹; Jackson Co., July (N); Lowndes Co., February (A); Lumpkin Co., July (A), August (N); Monroe Co., July (N); Muscogee Co., June (A); Schley Co., April (A)¹; Screven Co., September (N); Thomas Co., July (A)¹; Toombs Co., August (N); Whitfield Co., June and July (A)², September (A)¹. LOUISIANA, Tangipahoa Par., June (N). MISSISSIPPI, Benton Co., June (N); Clark Co., August (N); Franklin Co., August (N); Harrison Co., August (N); Holmes Co., July (N); Itawamba Co., July (N,A); Jasper Co., April (A); Lafayette Co., July (N,A); Lamar Co., May (N), August (A); Lauderdale Co., July (N,A); Lawrence Co., August (N,A); Leflore Co., June (A); Lowndes Co., June (A); Marion Co., August (N); Marshall Co., July (N); Monroe Co., July (A); Perry Co., August (N); Pike Co., August (N); Quitman Co., July (N); Sunflower Co., July (N,A). NORTH CAROLINA, Avery Co., February (N); Davidson Co., July (N,A); Jackson Co., August (A); Macon Co., June-July (A); Surry Co., February (N); Union Co., July (A). SOUTH CAROLINA, Aiken Co., May (A), July (N); Newberry Co., April, August (N); Oconee Co., August (A); Orangeburg Co., April (A); TENNESSEE, Cheatham Co., July (A); Davidson Co., June, July (A); Dekalb Co., June, July (N,A); Greene Co., August (N); Hamilton Co., December (N); Hawkins Co., August (N); Hickman Co., June (A); Humphreys Co., June (A); Obion Co., June (A); Polk Co., August (N,A); Sevier Co., June, July, August (A); Union Co., August (N); Wayne Co., July, August (N,A); Williamson Co., May (N).

Stenacron pallidum (Traver)

Physiographic provinces: P, BR

Previously published state records: N. C., Trav., 1933, 1937, L, 1974b.

Additional records: None.

GENUS *Stenonema* TRAVER

Stenonema alabamae Traver

Physiographic provinces: AP, ILP.

Previously published state records: Ala., Trav., 1937.

Additional records: ALABAMA, Lauderdale Co., June (A); Tuscaloosa Co., June (A).

Stenonema annexum Traver

Physiographic provinces: CP, P, BR, VR, ILP.

Previously published state records: Ga., L, 1974b; N. C., NTH, 1935, L, 1974b; S. C., NTH, 1935; Tenn., WB, 1949.

Additional records: ALABAMA, Lauderdale, June (A). GEORGIA, Calhoun Co., April (A)¹; Cherokee Co., August (A); Fulton Co., September (A)¹; Houston Co., March (A)¹; Jackson Co., July (N,A); Lumpkin Co., August (A); Walton Co., June (A)¹; Wiles Co., July (N,A). NORTH CAROLINA, Davidson Co., July (N,A); Jackson Co., June (N); Lincoln Co., July (A); Randolph Co., July (A); Surry Co., June (A); Union Co., July (A). SOUTH CAROLINA, Edgefield Co., July (N,A); Greenville Co., July (A)¹; Lexington Co., April (A). TENNESSEE, Greene Co., May (A); Hickman Co., May (A); Sevier Co., July (A); Union Co., August (A).

Stenonema bipunctatum (McDunnough)

Physiographic provinces: CP, BR, VR, AP, ILP.

Previously published state records: None.

Additional records: ALABAMA, Bibb Co., June (A); Cullman Co., June (A); Dallas Co., June (A); Perry Co., June (A); Walker Co., June (A). GEORGIA, Floyd Co., June (A); Muscogee Co., June (A). MISSISSIPPI, Lamar Co., August; Lawrence Co., August (A); Lowndes Co., June (A); Pike Co., August (A). NORTH CAROLINA, Macon Co., July (A). TENNESSEE, Cheatham Co., July (A); Lincoln Co., July (A).

Stenonema carlsoni Lewis

Physiographic provinces: P, BR

Previously published state records: Ga., L, 1974 a, b; S. C., L, 1974 a, b.

Additional records: None.

Stenonema exiguum Traver

Physiographic provinces: CP, P, BR, VR, AP, ILP.

Previously published state records: Ala., Trav., 1937, Ber., 1958, L, 1974b; Fla., Ber., 1950, 1958, PJ, 1973, Sch, 1967; Ga., NTH, 1935, Ber., 1958, L, 1974b; N. C., NTH, 1935; Wy., 1950, L, 1974b.

Additional records: ALABAMA, Baldwin Co., April (N); Barbour Co., June (N); Bibb Co., May (N), June (N,A); Blount Co., June (A); Cherokee Co., July (N,A); Cullman Co., June (A); Dallas Co., June (A); Escambia Co., April (N), June (A); Houston Co., February, June (N); Lauderdale Co., June (A); Macon Co., June (N,A); Mobile Co., June (N,A); Perry Co., May (N), June (A); Talladega Co., June (A); Tuscaloosa Co., May (A); Washington Co., May (A). FLORIDA, Alachua Co., October (A); Clay Co., January (N); Columbia Co., November (A); DeSoto Co., February-April, November (N); Escambia Co., March (N), August (A), October (N,A); Gadsden Co., April (N,A), June (A); Hernando Co., February (A); Jackson Co., April (A); Marion Co., July (A); Santa Rosa Co., June (A); Walton Co., April (A). GEORGIA, Baker Co., October (N,A); Cherokee Co., June (N,A), July (A), August (N,A); Decatur Co., March (A); June (N,A); Dougherty Co., September (A)¹; Echols Co., February (N); Floyd Co., June (A), July (A)¹, August (A); Fulton Co., June (A)¹; Johnson Co., August (N); Lowndes Co., March (N,A); Muscogee Co., June (A), July (A); Richmond Co., August (A); Thomas Co., June, July (A)¹; Troup Co., July (N). LOUISIANA, Natchitoches Par., April (A), May (A); Tangipahoa Par., August (N); Washington Par., June (A). MISSISSIPPI, Amite Co., June (N); Clark Co., August (N); Copiah Co., August (N); Franklin Co., August (N); Green Co., May (N); Harrison Co., August (N); Itawamba Co., July (N,A); Lamar Co., May (N); Lauderdale Co., June, July (A); Lawrence Co., August (N); Leflore Co., June (A); Lowndes Co., June (A); Marion Co., May (A), August (N); Monroe Co., July (N); Perry Co., August (N); Pike Co., August (N,A); Sunflower Co., July (A). NORTH CAROLINA, Surry Co., June (A). SOUTH CAROLINA, Aiken Co., May-July (A); Kershaw Co., July (N); Newberry Co., August (N,A). TENNESSEE, Hamilton Co., August (A); Lincoln Co., July (A); Sevier Co., August (A).

Stenonema femoratum (Say)

Physiographic provinces: P, BR, VR, AP, ILP.

Previously published state records: Ga., NTH, 1935; S. C., NTH, 1935.

Additional records: ALABAMA, Blount Co., June (N); Cullman Co., (N,A); Walker Co., June

(A). **GEORGIA**, Floyd Co., March (A); Whitfield Co., May, July (A)³. **SOUTH CAROLINA**, Greenville Co., July (A)⁴; Lexington Co., May (A)⁵; Oconee Co., May (A)⁶. **TENNESSEE**, Davidson Co., May (N), July (A); October (N).

Stenonema integrum (McDunnough)

Physiographic provinces: CP, P, BR, VR, ILP.

Previously published state records: Fla., L, 1974b; Ga., NTH, 1935; N. C., NTH, 1935 (as *S. bellum*), L, 1974b; S. C., L, 1974b.

Additional records: **ALABAMA**, Bibb Co., June (A); Dallas Co., June (A); Elmore Co., June (N,A). **GEORGIA**, Catoosa Co., July, August (A)³; Cherokee Co., June (A); Dawson Co., June (A); Floyd Co., June, August (A)³; Lowndes Co., February (A); Monroe Co., July (A); Muscogee Co., July (A); Richmond Co., June (A); Stephens Co., July (A)¹; Union Co., July (A); Walton Co., August (A)³; White Co., August (A), September (A)¹; Whitfield Co., June-August (A)³. **LOUISIANA**, East Baton Rouge Par., June (A), September (A); Natchitoches Par., (A). **MISSISSIPPI**, Lauderdale Co., June (A); Leflore Co., June (A); Lowndes Co., June (A); Marion Co., May (A). **NORTH CAROLINA**, Caldwell Co., July (N,A); Davidson Co., July (A); Forsyth Co., June (A); Lincoln Co., July (A); Person Co., July (A); Rockingham Co., July (A); Transylvania Co., August (N,A). **SOUTH CAROLINA**, Aiken Co., May (A); Anderson Co., July (N,A); Greenville Co., June (A)¹, August (N,A), September (A)⁴; Newberry Co., August (N,A); Oconee Co., July (A); August (A). **TENNESSEE**, Humphreys Co., June (A); Polk Co., August (A); Sevier Co., August (A); Shelby Co., June (A); Williamson Co., July (A).

Stenonema ithaca (Clemens and Leonard)

Physiographic provinces: BR, VR, AP, ILP.

Previously published state records: Ga., NTH, 1935, N. C., NTH, 1935, Trav., 1937, H, 1941; S. C., NTH, 1935; Tenn., WB, 1949.

Additional records: **ALABAMA**, Lauderdale Co., July (N); **GEORGIA**, Fannin Co., June (A)³; Lumpkin Co., May (A); Towns Co., June (A)³; Union Co., June (A)³. **NORTH CAROLINA**, Clay Co., June (A); Haywood Co., June (A); Jackson Co., June, August (A); Macon Co., June, July, August (A); Swain Co., June (A); Watauga Co., June (N); August (N), August (A); Yancey Co., July (A). **SOUTH CAROLINA**, Greenville Co., April, May, September (A)⁴. **TENNESSEE**, Fentress Co., May (A); Greene Co., May (A), July (A), August (N); Hawkins Co., August (N); Lincoln Co., July (N); Montgomery Co., July (N); Moore Co., July (N); Polk Co., August (A); Robertson Co., July (N); Sevier Co., July-August (A); Unicoi Co., August (N,A); Wayne Co., July (N).

Stenonema metriotes Burks

Physiographic provinces: CP, P, BR.

Previously published state records: None

Additional records: **LOUISIANA**, East Baton Rouge Par., June (A). **MISSISSIPPI**, Adams Co., June (A). **TENNESSEE**, Humphreys Co., June (A); Shelby Co., June (A).

Stenonema nepotellum McDunnough

Physiographic provinces: CP, ILP.

Previously published state records: Tenn., L, 1974b.

Additional records: **NORTH CAROLINA**, Cumberland Co., July (A); Macon Co., June (A); Rockingham Co., July (A); Wilkes Co., June (A). **SOUTH CAROLINA**, Lexington Co., April (A). **TENNESSEE**, Sevier Co., October (N).

Stenonema pudicum (Hagen)

Physiographic provinces: P, BR, VR, AP.

Previously published state records: N. C., NTH, 1935, Trav. 1937, H, 1941, L, 1974b; S. C., NTH, 1935; Tenn., WB, 1949.

Additional records: **GEORGIA**, Clarke Co., April (A); Habersham Co., April (A)¹. **NORTH CAROLINA**, Clay Co., April (N); Jackson Co., June (A), August (N,A); McDowell Co., April (N,A); Macon Co., June (N,A), July (A), August (N,A); Polk Co., July (N,A); Swain Co., April (N), June (N,A), August (A); Transylvania Co., August (A). **SOUTH CAROLINA**, Green-

ville Co., February (N)*; May-July, September (A)*; Oconee Co., August (N); Pickens Co., May (A)*. TENNESSEE, Blount Co., June (A); Cocke Co., April, June (A); Cumberland Co., July (N); Greene Co., March (N), May (A); Marion Co., April (N); Morgan Co., July (N); Rhea Co., April (N); Sevier Co., April, May, July, August (A); Unicoi Co., May, June, August (A).

Stenonema quinquespinum Lewis

Physiographic provinces: VR

Previously published state records: Ga., L, 1974a, b.

Additional records: None.

Stenonema rubrum (McDunnough)

Physiographic provinces: P, BR, VR, ILP.

Previously published state records: Ga., NTH, 1935; N. C., L, 1974b; S. C., 1935, NTH.

Additional records: GEORGIA, Dawson Co., June (A); Lumpkin Co., July (A). NORTH CAROLINA, Swain Co., August (N). SOUTH CAROLINA, Greenville Co., April (A)*; Laurens Co., August (A). TENNESSEE, Houston Co., June (A); Sevier Co., August (A).

Stenonema scitulum Traver

Physiographic provinces: CP, VR, ILP.

Previously published state records: None

Additional records: TENNESSEE, Benton Co., June (N,A); Granger Co., July (N); Hawkins Co., August (A); Hickman Co., June (A); Humphreys Co., June (N,A); Lincoln Co., July (N,A); Montgomery Co., July (N,A); Robertson Co., June (N).

Stenonema smithae Traver

Physiographic provinces: CP, P, VR, AP

Previously published state records: Ala., Trav., 1937; Ber., 1958, L, 1974b; Fla., Ber., 1950, 1958, PJ, 1973; Sch., 1967, L, 1974b; Ga., Ber., 1958.

Additional records: ALABAMA, Baldwin Co., April, June (N,A); Bibb Co., June (A); Conecuh Co., June (A); Dale Co., June (N); Dallas Co., June (A); Escambia Co., June (N,A); Houston Co., February (N); Macon Co., June (A); Marion Co., July (N); Mobile Co., June (N,A); St. Clair Co., June (A); Tuscaloosa Co., May (A); Walker Co., June (A). FLORIDA, Alachua Co., January (N,A), April (A), November (A); Baker Co., February (N); Clay Co., January (A); Columbia Co., November (A); Escambia Co., October (A); Gadsden Co., April (N,A), June (A); Hamilton Co., February, November (N); Levy Co., November (N); Liberty Co., March (N,A), June (N); Madison Co., January (N); Nassau Co., February (A); Okaloosa Co., April, May (A). GEORGIA, Baker Co., May (N), November (N,A); Charlton Co., February (N); Cherokee Co., June and August (A); Clinch Co., November (A); Early Co., February (N); Echols Co., February (A), November (N); Lowndes Co., March (N,A); Monroe Co., July (N,A); Muscogee Co., June (A). LOUISIANA, Tangipahoa Par., June (N). MISSISSIPPI, Jasper Co., April (A); Lafayette Co., July (N,A). SOUTH CAROLINA, Aiken Co., May (A).

Stenonema species

Physiographic provinces: CP, P, BR, VR, AP, ILP.

Additional records: ALABAMA, Baldwin Co., April, June (N,A); Bibb Co., June (A); Conecuh Co., June (A); Dale Co., June (N); Dallas Co., June (A); Dekalb Co., July (N); Elmore Co., April (N); Escambia Co., April (N); Henry Co., June (N); Randolph Co., June (N); St. Clair Co., July (N); Tuscaloosa Co., April, May, and June (N), May (A). FLORIDA, Escambia Co., March (N); Gadsden Co., April (A); Liberty Co., March (N); Okaloosa Co., May (A); Santa Rosa Co., August (N); Walton Co., April (A). GEORGIA, Cherokee Co., June (A), August (N); Cobb Co., August (N); Decatur Co., August (N); Forsyth Co., June (N); Macon Co., April (N); Peach Co., April (N); Rabun Co., July (N), August (A); Sumter Co., August (N); Toombs Co., August (N); Walker Co., April and July (N); Ware Co., April (N). MISSISSIPPI, Lamar Co., May and August (N); Marion Co., August (N); Stone Co., August (N). NORTH CAROLINA, Buncombe Co., May (N); Clay Co., April (N); Granville Co., December (N); Jackson Co., August (N); Macon Co., June (A), May-August (N); McDowell Co., May and August (N); Moore Co., December (N); Orange Co., February and May (N); Surry

Co., February (N); Swain Co., April-June (N)¹; Transylvania Co., March-July (N); Wake Co., February, May, December (N); Watauga Co., February (N). SOUTH CAROLINA, Chesterfield Co., December (N); Edgefield Co., April and July (N); Lexington Co., April (N); Oconee Co., August (A). TENNESSEE, Blount Co., June (N); Davidson Co., July (A), October (N); Giles Co., July (N); Greene Co., May (A), August (N); Hamilton Co., May (N); Henderson Co., June (N); Meigs Co., April (N); Morgan Co., July (N); Robertson Co., June (N); Rutherford Co., July (N); Sevier Co., April, June-August, December (N); Sumner Co., June (N); Van Buren Co., July (N).

Stenonema terminatum (Walsh)

Physiographic provinces: BR

Previously published state records: None

Additional records: NORTH CAROLINA, Macon Co., July (A)

Stenonema tripunctatum (Banks)

Physiographic provinces: CP, P, BR, VR, AP, ILP.

Previously published state records: Ala., Spieth, 1947; N. C., Spieth, 1947.

Additional records: ALABAMA, Calhoun Co., July (N); Marion Co., June (N). GEORGIA, Rabun Co., July (A)². LOUISIANA, Natchitoches Par., March (N), May (A). NORTH CAROLINA, Cabarrus Co., July (N); Davidson Co., July (N,A). SOUTH CAROLINA, Kershaw Co., April (N). TENNESSEE, Fentress Co., May (A); Hamilton Co., December (N); Lincoln Co., April (N); Moore Co., April (N); Union Co., May (N).

Stenonema varium Traver

Physiographic provinces: CP, BR, ILP

Previously published state records: Ga., Ber., 1958; N. C., NTH, 1935, H, 1941; S. C., NTH, 1935

Additional records: GEORGIA, Baker Co., March (A); Crawford Co., March (A)¹; Dougherty Co., November (N,A); Lumpkin Co., May (A)¹; Worth Co., November (N). NORTH CAROLINA, Macon Co., June (A), August (A). SOUTH CAROLINA, Greenville, June (A)¹. TENNESSEE, Lincoln Co., April (A).

Stenonema vicarium (Walker)

Physiographic provinces: Br

Previously published state records: N. C., NTH, 1935, H, 1941.

Additional records: NORTH CAROLINA, Macon Co., July (A); Swain Co., June (A).

SUBFAMILY SPINADINAE

GENUS *Spinadis* EDMUNDS AND JENSEN

Spinadis wallacei Edmunds and Jensen

Physiographic provinces: CP

Previously published state records: Ga., EJ, 1974.

Additional records: None.

SUBFAMILY ANEPEORINAE

GENUS *Anepeorus* McDUNNOUGH

Anepeorus simplex (Walsh)

Physiographic provinces: P

Previously published state records: Ga., NTH, 1935.

Additional records: None

SUPERFAMILY CAENOIDEA
FAMILY NEOEPHEMERIDAE
SUBFAMILY NEOEPHEMERINAE
GENUS *Neoephemera* McDUNNOUGH

Neoephemera compressa Berner

Physiographic provinces: CP

Previously published state records: Fla., Ber., 1956; Sch., 1967; Ga., Ber., 1956 and 1958.

Additional records: None.

Neoephemera purpurea (Traver)

Physiographic provinces: BR, AP

Previously published state records: N. C., NTH, 1935; Trav., 1937; H, 1941.

Additional records: GEORGIA, Rabun Co., July (N). NORTH CAROLINA, Jackson Co., August (N); Macon Co., August (N); Polk Co., July (N); Swain Co., August (N); Transylvania Co., June and August (N). SOUTH CAROLINA, Greenville Co., June (A)*. TENNESSEE, Morgan Co., July (N).

Neoephemera youngi Berner

Physiographic provinces: CP, P.

Previously published state records: Fla., Ber., 1950 (as *Orieanthus* sp. no. 1 Trav.), 1953, 1956, and 1958; PJ, 1973; Sch., 1967; Ga., Ber., 1953, 1956, and 1958; S. C., Ber., 1956.

Additional records: ALABAMA, Elmore Co., April (N); Escambia Co., April; Macon Co., April (N). FLORIDA, Liberty Co., March (N); Okaloosa Co., May (N); Santa Rosa Co., August (N).

FAMILY CAENIDAE
SUBFAMILY CAENINAE
GENUS *Brachycerus* CURTIS

Brachycercus flavus Traver

Physiographic provinces: CP

Previously published state records: La., NTH, 1935.

Additional records: None

Brachycercus maculatus Berner

Physiographic provinces: CP

Previously published state records: Fla., Ber., 1950.

Additional records: FLORIDA, DeSoto Co., August (N); Hamilton Co., July (A).

Brachycercus nitidus (Traver)

Physiographic provinces: P, BR

Previously published state records: Fla., WR, 1955; N. C., Trav., 1932.

Additional records: GEORGIA, Cherokee Co., June (N,A); Rabun Co., July (N). NORTH CAROLINA, Jackson Co., July (N); Transylvania Co., June (N).

Brachycercus prudens (McDunnough)

Physiographic provinces: CP

Previously published state records: None

Additional records: ALABAMA, Perry Co., June (A)

Brachycercus species

Physiographic provinces: CP, P

Additional records: ALABAMA, Dallas Co., June (A). FLORIDA, Escambia Co., August (N,A).

August (A), October (N); Okaloosa Co., August (N). GEORGIA, Baker Co., May (N); Cherokee Co., June (N); Monroe Co., July (A). MISSISSIPPI, Harrison Co., August (N); Lawrence Co., August (A); Lowndes Co., June (A).

Brachycercus species A

Physiographic provinces: CP, P, VR

Previously published state records: Fla., Ber., 1950, 1958, Sch, 1967.

Additional records: ALABAMA, Macon Co., April (A). FLORIDA, Liberty Co., March (N), April (A), June (N,A); Santa Rosa Co., August (N). GEORGIA, Dawson Co., June (N); Decatur Co., June. MISSISSIPPI, Covington Co., August (N). SOUTH CAROLINA, Aiken Co., May (N)².

GENUS *Caenis* STEPHENS*Caenis amica* Hagen

Physiographic provinces: CP, P, BR, AP, ILP

Previously published state records: N. C., NTH, 1935.

Additional records: GEORGIA, Rabun Co., April (A)³. SOUTH CAROLINA, Beaufort Co., August (A)⁴; Spartanburg Co., June (A). TENNESSEE, DeKalb Co., July (A); Sevier Co., July (A).

Caenis anceps Traver

Physiographic provinces: AP, VR

Previously published state records: None

Additional records: ALABAMA, Cherokee Co., July (A). TENNESSEE, Campbell Co., August (A); Hamilton Co., August (A).

Caenis diminuta Walker

Physiographic provinces: CP, P, VR

Previously published state records: Fla., Walker, 1853, NTH, 1935, Ber., 1950 and 1958, PJ, 1973, Sch, 1967; Ga., NTH, 1935, Ber., 1958.

Additional records: ALABAMA, Bibb Co., June (A); Cleburne Co., July (A); Macon Co., April June (A); Mobile Co., June (N); Perry Co., June (A). FLORIDA, Alachua Co., July (A); Broward Co., November (A); Columbia Co., October (A), November (N); DeSoto Co., August (N); Escambia Co., August (A); Gadsden Co., March (A), April (A), June (A); Gulf Co., April (A); Hamilton Co., March (A); Hernando Co., February (A); Highlands Co., April (A); Jackson Co., April (A); Lee Co., September (A); Levy Co., September (A); Monroe Co., January (A), February (A); Nassau Co., February (A); Okaloosa Co., May (A); Santa Rosa Co., June, August (A). GEORGIA, Charlton Co., February (N); Clinch Co., November (A); Decatur Co., June (A), July (A)⁵; Echols Co., February (N); Lowndes Co., March (A); Thomas Co., May (N). LOUISIANA, Orleans Co., June (A). MISSISSIPPI, Forrest Co., August (N); Itawamba Co., July (A); Lafayette Co., July (A); Lawrence Co., August (A); Lauderdale Co., April, June, July (A); Monroe Co., July (A); Pike Co., June, August (A); Sunflower Co., July (A); Tallahatchie Co., July (A). NORTH CAROLINA, Wayne Co., June (A), September (A). SOUTH CAROLINA, Aiken Co., March⁶, April², May², June², July², August², October² (A); Chesterfield Co., July (A); Darlington Co., July; Greenwood Co., April (A); Orangeburg Co., April (A); Richmond Co., April (A), July (A). TENNESSEE, Obion Co., June (A).

Caenis hilaris (Say)

Physiographic provinces: CP, P, VR, AP

Previously published state records: Ala., Ber., 1958; Fla., Ber., 1950 and 1958, PJ, 1973, Sch, 1967; Ga., Ber., 1958.

Additional records: ALABAMA, Barbour Co., June (N); Bibb Co., June (A); Cherokee Co., July (A); Coosa Co., June (N); Dallas Co., June (N,A); DeKalb Co., June (N); Escambia Co., June (N); Macon Co., June (N,A); Perry Co., June (N,A); Tuscaloosa Co., June (N); Walker Co., June (N,A). FLORIDA, Escambia Co., August (A); Gadsden Co., June (A); Liberty Co., June (N); Santa Rosa Co., June (A). GEORGIA, Cherokee Co., June (N,A), August (A); Decatur Co., June (A). LOUISIANA, Orleans Co., April (A); Union Co., July (A). MISSISSIPPI, Copiah Co., August (N); Covington Co., August (N); Forrest Co., August (A); Franklin Co., June, August (N); Lamar Co., August (A); Lauderdale Co., June (A), July (A); Lawrence Co., August (A); Lowndes Co., June (A); Pike Co., June, August (A); Smith Co., August (N); Sunflower Co., July (A). NORTH CAROLINA, Johnston Co., September (A); Wayne Co., June (A). SOUTH CAROLINA, Aiken Co., June², July², August² (A); Chesterfield Co., July (A); Spartanburg Co., June (A). TENNESSEE, DeKalb Co., July (A).

Caenis jocosa McDunnough

Physiographic provinces: CP, VR, AP, ILP

Previously published state records: Ala., Trav., 1937.

Additional records: ALABAMA, Bibb Co., June (A); Lauderdale Co., June (A); Walker Co., June (A). LOUISIANA, Natchitoches Co., March (A), April (A). MISSISSIPPI, Coahoma Co., July (N,A); Lafayette Co., July (N,A).

Caenis ridens McDunnough

Physiographic provinces: CP, VR, AP, ILP

Previously published state records: Ala., Trav., 1937.

Additional records: LOUISIANA, (county unknown) July (A). TENNESSEE, Davidson Co., July (A); Sevier Co., July (A), August (N,A).

Caenis simulans McDunnough

Physiographic provinces: CP, VR, AP

Previously published state records: None

Additional records: LOUISIANA, Calcasieu Par., March (A); Lafayette Par., March, October, November (A). TENNESSEE, Fentress Co., May (A).

Caenis species

Physiographic provinces: CP, P, BR, VR, AP, ILP

Additional records: GEORGIA, Baker Co., May (N); Burke Co., August, September (N); Dawson Co., June (N); Effingham Co., July (N); Jackson Co., July (N); Johnson Co., August (N); Seminole Co., June (N). LOUISIANA, Lafayette Co., October (A), November (N,A); Natchitoches Co., July (A); Washington Co., August (N). MISSISSIPPI, Lamar Co., May (N), August (N). NORTH CAROLINA, Cabarrus Co., July (N); Davidson Co., July (N); Granville Co., July (N); Haywood Co., August (N); Henderson Co., June (N); Macon Co., July, August (N); Person Co., July (N); Polk Co., July (N); Randolph Co., July (N); Rockingham Co., July (N); Transylvania Co., August (N); Wilkes Co., June (N). SOUTH CAROLINA, Aiken Co., July (N); Anderson Co., July (N); Edgefield Co., April (N), July (N); Fairfield Co., April (N); Greenville Co., August (N); Kershaw Co., July (N); Lancaster Co., June (N), July (N); Laurens Co., April (N); Marlboro Co., July (N); Orangeburg Co., October (N); Pickens Co., August (N). TENNESSEE, Benton Co., June (N); Davidson Co., October (N); Giles Co., July (N); Lincoln Co., July (N); Rutherford Co., July (N).

SUPERFAMILY PROSOPISTOMATOIDEA

FAMILY BAETISCIDAE

SUBFAMILY BAETISCINAE

GENUS *Baetisca* WALSH*Baetisca becki* Schneider and Berner

Physiographic provinces: CP

Previously published state records: Fla., SB, 1963, PJ, 1973, PP, 1971, PP, 1974, Sch, 1967.

Additional records: FLORIDA, Escambia Co., May (N); Okaloosa Co., May (A); Santa Rosa Co., (N).

Baetisca callosa Traver

Physiographic provinces: CP.

Previously published state records: Miss., SB., 1963.

Additional records: None

Baetisca carolina Traver

Physiographic provinces: P, BR.

Previously published state records: N. C. Trav. 1931 and 1937, H, 1941 (as *B. thomsenae*), Ber., 1955; Tenn., WB, 1949 (as *B. thomsenae*).

Additional records: GEORGIA, Cherokee Co., June (N). NORTH CAROLINA, Buncombe Co., May (N); Henderson Co., March (N); Jackson Co., June (N); Macon Co., June (A), August (N); McDowell Co., April, May (N); Polk Co., July (N); Surry Co., February (N); Transylvania

Co., May, June, (N), August (N); Yadkin Co., May (N). TENNESSEE, Greene Co., March (A), April (N), May (N).

Baetisca escambiensis Berner

Physiographic provinces: CP.

Previously published state records: Fla., Ber., 1955, PJ, 1973, Sch, 1967.

Additional records: FLORIDA, Escambia Co., October (N), November (A); Okaloosa Co., August (N); Santa Rosa Co., August (N).

Baetisca gibbera Berner

Physiographic provinces: CP.

Previously published state records: Fla., Ber., 1955, PJ, 1973, Sch, 1967; Ga., Ber., 1955 and 1958.

Additional records: FLORIDA, Clay Co., January (N); Escambia Co., October (N); Holmes Co., September (N). GEORGIA, Baker Co., November, (N); Echols Co., February (N); Merriweather Co., September (N). MISSISSIPPI, Itawamba Co., July (N). SOUTH CAROLINA, North Anna River, September (N)².

Baetisca obesa (Say)

Physiographic provinces: CP, P.

Previously published state records: Fla., Ber., 1953, 1955 and 1958, PJ, 1973, Sch, 1967; Ga., NTH, 1935, Ber., 1955; Miss., Ber., 1955.

Additional records: FLORIDA, Escambia Co., April (N); Gulf Co., April (N); Hamilton Co., February (N), March (N,A); Madison Co., January (N), March (A); Okaloosa Co., March (N), April (N); Santa Rosa Co., April (N). GEORGIA, Cowetta Co., April (N)³; Echols Co., February (N); Lowndes Co., February (A), March (N,A). MISSISSIPPI, Rankin Co., April (A). SOUTH CAROLINA, Aiken Co., May (N)²; Chesterfield Co., May (A)¹; Orangeburg Co., April (A).

Baetisca rogersi Berner

Physiographic provinces: CP, P.

Previously published state records: Ala., Ber., 1958; Fla., Ber., 1950, 1955, and 1958, PJ, 1973, Sch, 1967; Ga., Ber., 1955 and 1958, PP, 1974; S. C., PP, 1974.

Additional records: ALABAMA, Barbour Co., June (N); Escambia Co., March (N); April (N), May (N), June (A); Washington Co., May (N). FLORIDA, Escambia Co., January (N), April (N); Gadsden Co., April (N); Liberty Co., March (N), April (N,A); Okaloosa Co., March (N); Santa Rosa Co., August (N), September (N). GEORGIA, Cherokee Co., June (N); De-catur Co., March (N); Peach Co., April (N). SOUTH CAROLINA, Aiken Co., January (N)², May (N)²; Lexington Co., April (N).

Baetisca species

Physiographic provinces: CP.

Additional records: SOUTH CAROLINA, Aiken Co., May (N)² (identified as *B. laurentina* by S. Roback); Orangeburg Co., October (N).

SUPERFAMILY LEPTOPHLEBIOIDEA

FAMILY LEPTOPHLEBIIDAE

SUBFAMILY LEPTOPHLEBIINAE

GENUS *Choroterpes* EATON

Choroterpes basalis (Banks)

Physiographic provinces: VR

Previously published state records: None

Additional records: GEORGIA, Walker Co., August (A).

Choroterpes hubbelli Berner

Physiographic provinces: CP

Previously published state records: Fla., Ber., 1950, Sch, 1967.

Additional records: ALABAMA, Dallas Co., June (N). FLORIDA, Alachua Co., August (A); Glades Co., October (N); Hamilton Co., July (A). GEORGIA, Thomas Co., May (N), June, July (A)¹; Toombs Co., August (N). LOUISIANA, Tangipahoa Par., June (N,A). MISSISSIPPI, Forrest Co., August (A); Harrison Co., August (N); Lamar Co., May (N), August (N,A); Lauderdale Co., July (A).

Choroterpes species

Physiographic provinces: CP, ILP

Additional records: GEORGIA, Colquitt Co., (N); Tift Co., October (N). LOUISIANA, St. Helena Par., August (N). MISSISSIPPI, Clay Co., August (N); Harrison Co., August (N); Marion Co., August (N). TENNESSEE, Davidson Co., June, July (A), October (N); Giles Co., July (N); Lincoln Co., July (N); Robertson Co., June (N); Rutherford Co., July (N); Williamson Co., July (A).

GENUS *Habrophlebia* EATON*Habrophlebia* species

Physiographic provinces: BR

Additional records: NORTH CAROLINA, Macon Co., June and July (N); McDowell Co., August (A).

Habrophlebia vibrans Needham

Physiographic provinces: CP, P, BR

Previously published state records: Fla., Ber., 1950, PJ, 1973, Sch, 1967; N. C., Banks, 1914 (as *H. jocosa*), NTH, 1935 (as *H. pusilla*); S. C., NTH, 1935 (as *H. pusilla*).

Additional records: ALABAMA, Escambia Co., April (A); Tuscaloosa Co., May (A). GEORGIA, DeKalb Co., June (A)²; Peach Co., April (A); NORTH CAROLINA, Haywood Co., July (A); Jackson Co., July (A); Macon Co., July (A), June (A); Swain Co., June (A). SOUTH CAROLINA, Greenville Co., April (A), August (A)³; Lexington Co., April (A). TENNESSEE, Sevier Co., June (A), December (N).

GENUS *Habrophlebiodes* ULMER*Habrophlebiodes americana* (Banks)

Physiographic provinces: CP, P, BR, VR, AP

Previously published state records: N. C., NTH, 1935, Trav., 1937 (as *H. betteni*); S. C., NTH, 1935; Tenn., WB, 1949.

Additional records: ALABAMA, Tuscaloosa Co., May (A). GEORGIA, DeKalb Co., June (A)³; Gordon Co., June (A)³; Houston Co., May (A)³; White Co., June (A)². NORTH CAROLINA, Clay Co., April (N); Haywood Co., July (A); Jackson Co., June, August, September (A); Macon Co., June, July, August (A), July (N); Yancey Co., (A). SOUTH CAROLINA, Greenville Co., May, June, September (A)⁴; Oconee Co., July (A). TENNESSEE, Benton Co., June (A); Greene Co., April, May, June (A); Sevier Co., May, June (A)², June (A).

Habrophlebiodes brunneipennis Berner

Physiographic provinces: CP

Previously published state records: Ala., Ber., 1958; Fla., Ber., 1950 and 1958, PJ, 1973, Sch, 1967; Ga., Ber., 1958.

Additional records: ALABAMA, Conecuh Co., June (N); Escambia Co., June (N); Mobile Co., June (N). FLORIDA, Alachua Co., January (A); Gadsden Co., June (N); Liberty Co., March (N); June (A). GEORGIA, Decatur Co., March (N,A), April (A). SOUTH CAROLINA, Aiken Co., May (A).

Habrophlebiodes celeteria Berner

Physiographic provinces: BR

Previously published state records: Tenn., Ber., 1975.

Additional records: None.

Habrophlebiodes species

Physiographic provinces: CP, P, BR, VR, AP.

Additional records: ALABAMA, Calhoun Co., July (A); DeKalb Co., 1954 (N); Elmore Co., April (N); Escambia Co., April (N,A); Henry Co., June (N); Randolph Co., June (N); Tuscaloosa Co., April, June (N). GEORGIA, Dawson Co., June (N); Forsyth Co., June (N); Macon Co., April (N); Peach Co., April (N); Rabun Co., July, August (N). LOUISIANA, Tangipahoa Co., June (N). MISSISSIPPI, Perry Co., June (N); Stone Co., August (N). NORTH CAROLINA, Avery Co., February (N); Buncombe Co., May (N); Macon Co., May-July (N); Orange Co., May (N); Swain Co., May, June (N)¹. Transylvania Co., May (N); Yancey Co., May and July (N). SOUTH CAROLINA, Edgefield Co., April, July (N); Lexington Co., April (N); Orangeburg Co., April (A). TENNESSEE, Benton Co., June (A); Blount Co., June (N); Greene Co., April, May, June (A); Sevier Co., June (A)¹, May, June (A), December (N); Unicoi Co., September (A).

GENUS *Leptophlebia* WESTWOOD*Leptophlebia austrina* (Traver)

Physiographic provinces: BR

Previously published state records: N. C., NTH, 1935.

Additional records: GEORGIA, Rabun Co., April (A)³. SOUTH CAROLINA, Greenville Co., April, March (A)⁴.

Leptophlebia bradleyi Needham

Physiographic provinces: CP

Previously published state records: Fla., Ber., 1950; Sch., 1967; Ga., Need., 1932, NTH, 1935, Ber., 1958, 1975.

Additional records: ALABAMA, Baldwin Co., December (N). FLORIDA, Alachua Co., January, February (A); Bay Co., February (A); Clay Co., January (A); Hamilton Co., November (N). GEORGIA, Bryan Co., December (N); Coffee Co., March (N,A); Dooley Co., December (A); Echols Co., November (N); Houston Co., March (A); Lowndes Co., February (N,A). LOUISIANA, St. Tammany Par., November (N).

Leptophlebia collina (Traver)

Physiographic provinces: CP, P, BR

Previously published state records: N. C., NTH, 1935; S. C., NTH, 1935.

Additional records: FLORIDA, Baker Co., March (A). GEORGIA, Fulton Co., March (A)³; Lowndes Co., February (A); Stephens Co., May (A)³. SOUTH CAROLINA, Anderson Co., April (A)⁴; Greenville Co., March-April (A)⁴.

Leptophlebia cupida (Say)

Physiographic provinces: P, BR, VR, ILP

Previously published state records: N. C., Eaton, 1884; Tenn., WB, 1949.

Additional records: GEORGIA, Paulding Co., March (A)³; Rabun Co., May (A)³. TENNESSEE, Greene Co., February, March (N); Hawkins Co., April (A); Knox Co., March (N); Lincoln Co., April (N,A).

Leptophlebia grandis (Traver)

Physiographic provinces: P

Previously published state records: N. C., NTH, 1935

Additional records: None

Leptophlebia intermedia (Traver)

Physiographic provinces: CP, P

Previously published state records: Ala., Ber., 1958, PJ, 1973, Sch., 1967; Fla., Ber., 1950 and 1958; Ga., Ber., 1958; N. C., NTH, 1935.

Additional records: GEORGIA, Berrien Co., March (A); Charlton Co., February (N,A); Dougherty Co., November (N); DeKalb Co., April (A); Grady Co., November (N); Lowndes Co., February (A), March (A); Macon Co., April (N,A); Thomas Co., May (N); SOUTH CAROLINA, Chesterfield Co., December (N).

Leptophlebia johnsoni McDunnough

Physiographic provinces: P

Previously published state records: N. C., NTH, 1935 (As *L. gracilis* Trav.).

Additional records: None

Leptophlebia species

Physiographic provinces: CP, P, BR, VR.

Additional records: ALABAMA, Houston Co., February (N); FLORIDA, Okaloosa Co., May (A). GEORGIA, Burke Co., April (N)³; Catoosa Co., March (N)²; Clayton Co., March (N)³; Columbia Co., April (N)²; Crawford Co., March (A)¹; DeKalb Co., April (N)³; Fayette Co., March (A)¹; Fulton Co., April (N)³; Hall Co., March (N); Henry Co., March (N)³; Lowndes Co., March (N)³; Richmond Co., April (N)³; Sumter Co., December (N). LOUISIANA, St. Tammany Par. March (N); Tangipahoa Par., June (N). MISSISSIPPI, Harrison Co., December (N). NORTH CAROLINA, McDowell Co., April (N,A); Orange Co., February (N). SOUTH CAROLINA, Greenville Co., March, June (N)²; Lexington Co., April (N,A).

GENUS *Paraleptophlebia* LESTAGE

Paraleptophlebia adoptiva (McDunnough)

Physiographic provinces: BR

Previously published state records: N. C., Trav., 1937, H, 1971.

Additional records: GEORGIA, Lumpkin Co., April (N); Towns Co., June (A)³

Paraleptophlebia assimilis (Banks)

Physiographic provinces: BR

Previously published state records: N. C., NTH, 1935; S. C., NTH, 1935.

Additional records: GEORGIA, Union Co., May (A)³; White Co., June (A)¹. NORTH CAROLINA, Clay Co., April (A); Macon Co., July (A). SOUTH CAROLINA, Greenville Co., April (A)⁴.

Paraleptophlebia debilis (Walker)

Physiographic provinces: BR

Previously published state records: N. C., Trav., 1932, H, 1941; S. C., PCR, 1967.

Additional records: NORTH CAROLINA, Watauga Co., August (A)

Paraleptophlebia georgiana Traver

Physiographic provinces: VR.

Previously published state records: Ga., NTH, 1935.

Additional records: GEORGIA, Whitfield Co., May and June (A)³.

Paraleptophlebia guttata (McDunnough)

Physiographic provinces: BR, VR, ILP.

Previously published state records: N. C., NTH, 1935, Trav., 1937, H, 1941; Tenn., WB, 1949.

Additional records: GEORGIA, Rabun Co., June (A)³; White Co., June (A)¹. NORTH CAROLINA, Avery Co., August (A); Haywood Co., July (A); Jackson Co., August (N,A), September (A); Macon Co., June, July, August (A); Swain Co., August (A). SOUTH CAROLINA, Oconee Co., July (A). TENNESSEE, Claiborne Co., July (A); Davidson Co., May (A); Dickson Co., June (N); Greene Co., May, June (A); Hickman Co., June (N,A); Houston Co., June (N,A); Sevier Co., June (A); Wayne Co., July (N,A).

Paraleptophlebia jeanae Berner

Physiographic provinces: CP, P

Previously published state records: None

Additional records: ALABAMA, Sumter Co., April (A). SOUTH CAROLINA, Edgefield Co., April (A).

Paraleptophlebia moerens (McDunnough)

Physiographic provinces: VR

Previously published state records: N. C., NTH, 1935.

Additional records: GEORGIA, Gilmer Co., June (A)³. TENNESSEE, Claiborne Co., July (A).

Paraleptophlebia mollis (Eaton)

Physiographic provinces: BR

Previously published state records: N. C., Eaton, 1884, Trav., 1937.

Additional records: None.

Paraleptophlebia species

Physiographic provinces: CP, P, BR, VR, AP, ILP.

Additional records: ALABAMA, DeKalb Co., April, May, July (N); Elmore Co., April (N); Tuscaloosa Co., April (N). GEORGIA, Crawford Co., May (A)³; Dawson Co., June (N,A); Hancock Co., August (N,A); Heard Co., July (N); Lumpkin Co., April (A)¹, June (A)³; Union Co., June (A)³. MISSISSIPPI, Claiborne Co., April (N); Franklin Co., August (N); Lafayette Co., July (N); Monroe Co., July (N); Stone Co., August (N). NORTH CAROLINA, Avery Co., April (N); Jackson Co., June and August (A); Macon Co., July, August, and September (N), June, July, and August (A); McDowell Co., August (A); Orange Co., May (N); Pender Co., March and April (A); Person Co., July (A); Swain Co., April, August, December (N), June (N,A), August (A); Transylvania Co., March and June (N); Watauga Co., July (A). SOUTH CAROLINA, Edgefield Co., April, July (N); Laurens Co., April (A); Newberry Co., April (A); Oconee Co., July (A). TENNESSEE, Blount Co., June (N); Greene Co., August (N); Henderson Co., June (N); Robertson Co., June (N); Sevier Co., May (N)¹, May-August, December (N).

Paraleptophlebia swannanoa (Traver)

Physiographic provinces: CP, BR, VR.

Previously published state records: N. C., NTH, 1935, Trav., 1937, H, 1941; S. C., NTH, 1935.

Additional records: GEORGIA, Fannin Co., June (A)³; White Co., June (N)³. NORTH CAROLINA, Haywood Co., July (A). SOUTH CAROLINA, Greenville Co., October (A)⁴; Orangeburg Co., April (N,A).

Paraleptophlebia volitans (McDunnough)

Physiographic provinces: CP, P, BR, VR, AP.

Previously published state records: Fla., Ber., 1950 and 1958, PJ, 1973, Sch, 1967; Ga., NTH, 1935.

Additional records: ALABAMA, Baldwin Co., June (N); Conecuh Co., June (N); Covington Co., June, July (N); Dallas Co., June (N); DeKalb Co., July (N); Elmore Co., April (N); Escambia Co., April, June (N,A); Mobile Co., June (N,A); Monroe Co., April (N). FLORIDA, Columbia Co., November (N); Escambia Co., October (N); Gadsden Co., April (N); Santa Rosa Co., August (N). GEORGIA, Crawford Co., May (A)¹; Early Co., February (N); Echols Co., February (N); Gordon Co., June (A)¹; Lanier Co., August (A); Lowndes Co., March (N,A); Macon Co., April (N,A); Peach Co., April (A), June (A)³; Schley Co., April (A)¹; Taylor Co., April (A)¹. LOUISIANA, Tangipahoa Par., June (A). MISSISSIPPI, Lafayette Co., July (A); Lamar Co., May (A), August (A); Marion Co., August (A). NORTH CAROLINA, Transylvania Co., July (A). SOUTH CAROLINA, Aiken Co., May (A), July (N); Greenville Co., June (A)⁴; Kershaw Co., July (N); Lexington Co., April (N,A); Orangeburg Co., April (A).

**FAMILY EPHemerellidae
SUBFAMILY EPHemerellinae
GENUS *Ephemerella* WALSH**

Ephemerella alleghenensis Traver

Physiographic provinces: BR

Previously published state records: N. C., AE, 1962.

Additional records: GEORGIA, Lumpkin Co., July, August (N). NORTH CAROLINA, Graham Co., August (N); Macon Co., August (N); McDowell Co., August (N); Swain Co., August (N). TENNESSEE, Unicoi Co., August (N).

Ephemerella argo Burks

Physiographic provinces: CP

Previously published state records: Ga., S. C., PCR, 1967.

Additional records: None

Ephemerella attenuata McDunnough

Physiographic provinces: CP, P, BR, VR, AP.

Previously published state records: Ala., AE, 1961; Fla., Ber., 1950 and 1958 (as *E. hirsuta*), PJ, 1973, Sch, 1967 (as *E. hirsuta*); Ga., AE, 1961; S. C., AE, 1961.

Additional records: ALABAMA, Coosa Co., June (N); Escambia Co., April (N); Macon Co., April (N); Walker Co., June (N). FLORIDA, Escambia Co., March (N); Liberty Co., April (N). GEORGIA, Cherokee Co., June (N); Dawson Co., June (N); Macon Co., April (N); Peach Co., April (N). NORTH CAROLINA, Macon Co., July (N). SOUTH CAROLINA, Aiken Co., May (A); Edgefield Co., April (N); Lexington Co., April (N).

Ephemerella berneri Allen and Edmonds

Physiographic provinces: P

Previously published state records: Ga., AE, 1965

Additional records: None

Ephemerella bicolor Clemens

Physiographic provinces: BR, ILP

Previously published state records: N. C., AE, 1963; Tenn., WB, 1949.

Additional records: TENNESSEE, Greene Co., April (N); Lincoln Co., April (N).

Ephemerella carolina Berner and Allen

Physiographic provinces: BR

Previously published state records: N. C., BA, 1961, AE, 1963; Tenn., AE, 1963.

Additional records: NORTH CAROLINA, Macon Co., July, August (N); Polk Co., July (N); Swain Co., June, August (N); Transylvania Co., July (N).

Ephemerella catawba Traver

Physiographic provinces: P, BR, VR, AP

Previously published state records: Ga., AE, 1965; N. C., NTH, 1935, Trav., 1937; Tenn., WB, 1949, AE, 1965.

Additional records: GEORGIA, Cherokee Co., June (N); Clark Co., April (N)¹; Fulton Co., April (N); Rabun Co., May (N)²; Union Co., May (N)¹. Walker Co., April (N). NORTH CAROLINA, Avery Co., February (N); Buncombe Co., April (N)¹, May (N); Haywood Co., July (N); Jackson Co., April (N)¹, June (N); Macon Co., May, July, August (N), September (A); McDowell Co., April (N); Polk Co., July (N); Swain Co., May (N)¹, April, May, August (N); Transylvania Co., June (N); Yancey Co., July (N). SOUTH CAROLINA, Greenville Co., August (N). TENNESSEE, Cocke Co., April (N); Cumberland Co., April (N); Greene Co., May (N); Marion Co., April (N); Sevier Co., May, June (N)¹.

Ephemerella choctawhatchee Berner

Physiographic provinces: CP

Previously published state records: Fla., Ber., 1950 and 1958, AE, 1965, Sch, 1967; Ga., Ber., 1958.

Additional records: **FLORIDA**, Gadsden Co., April (N); Liberty Co., March (A,N), April (A).
GEORGIA, Burke Co., January (N)²; Decatur Co., March (A,N); Early Co., February (N).
SOUTH CAROLINA, Aiken Co., May (N)²; Allendale Co., May (N)².

Ephemerella conestee Traver

Physiographic provinces: BR, AP.

Previously published state records: N. C., NTH, 1935, H, 1941, AE, 1962; Tenn., NTH, 1935, AE, 1962.

Additional records: **ALABAMA**, DeKalb Co., April (N). **GEORGIA**, Lumpkin Co., July (N)³; Rabun Co., (N). **NORTH CAROLINA**, Avery Co., August (N); Jackson Co., August (N); Macon Co., June, July, August, September (N); McDowell Co., August (N); Swain Co., August (N); Transylvania Co., June, July, August (N); Watauga Co., July (N); Yancey Co., July, August (N). **SOUTH CAROLINA**, Oconee Co., August (N). **TENNESSEE**, Greene Co., August (N).

Ephemerella cornuta Morgan

Physiographic provinces: BR.

Previously published state records: N. C., NTH, 1935, Trav., 1937, AE, 1962; Tenn., Burks, 1953.

Additional records: **GEORGIA**, Tray Mt., July (A)³. **NORTH CAROLINA**, Jackson Co., April (N); Macon Co., June (N); Swain Co., May (N)¹, July (N), June (A,N), August (N); Transylvania Co., June, July (N). **TENNESSEE**, Sevier Co., May, June (N)¹.

Ephemerella cornutella McDunnough

Physiographic provinces: BR, VR.

Previously published state records: Ga., NTH, 1935; N. C., NTH, 1935, Trav., 1937, H, 1941, AE, 1962; Tenn., WB, 1949, AE, 1962.

Additional records: **GEORGIA**, Rabun Co., May (N); White Co., June (A)³. **NORTH CAROLINA**, Macon Co., August (N); McDowell Co., May (N); Swain Co., May-July (N); Transylvania Co., July (N); Watauga Co., June, August (N). **TENNESSEE**, Blount Co., June (N); Greene Co., May (N); Hawkins Co., July (N); Sevier Co., June (N).

Ephemerella coxalis McDunnough

Physiographic provinces: BR, VR

Previously published state records: Ga., NTH, 1935; N. C., NTH, 1935, Trav., 1937; Tenn., WB, 1949.

Additional records: **GEORGIA**, Catoosa Co., July (N)³. **NORTH CAROLINA**, Henderson Co., June (N)¹. **TENNESSEE**, Greene Co., March, May (N).

Ephemerella crenula Allen and Edmunds

Physiographic provinces: BR

Previously published state records: N. C., AE, 1965; Tenn., AE, 1965.

Additional records: **NORTH CAROLINA**, Swain Co., May (N); Yancey Co., May (N).

Ephemerella deficiens Morgan

Physiographic provinces: CP, P, BR, VR, AP, ILP

Previously published state records: Ala., BA, 1961; Fla., Ber., 1950 (as *Ephemerella* sp. A), BA, 1961, PJ, 1973, Sch, 1967; Ga., Burks, 1953, BA, 1961; Miss., BA, 1961; N. C., NTH, 1935, Burks, 1953, BA, 1961; S. C., BA, 1961, PCR, 1967; Tenn., WB, 1949, BA, 1961.

Additional records: **ALABAMA**, Bibb Co., June (A,N), May (N); Coosa Co., June (N); Covington Co., July (N); Dallas Co., June (N); Elmore Co., June (N); Lauderdale Co., June; July (N); Macon Co., June (N); Mobile Co., June (N); Shelby Co., June (N); Tuscaloosa Co., June (N); Walker Co., June (N). **FLORIDA**, Gadsden Co., April (N); Liberty Co., March (N). **GEORGIA**, Cherokee Co., June, August (N); Dawson Co., June (N); Decatur Co., April, August (N); Early Co., February (N); Peach Co., April (N); Pickens Co., June (N); Pike Co., April (N)³; Rabun Co., July (N); Wilkes Co., July (N). **MISSISSIPPI**, Lauderdale Co., July (N); Pike Co., August (N). **NORTH CAROLINA**, Caldwell Co., July (N); Davidson Co., July (N); Jackson Co., June (N); Macon Co., August (N); Swain Co., May (N)², June (N,A);

Transylvania Co., June (N), July (A). **SOUTH CAROLINA**, Aiken Co., May (N); Edgefield Co., July (N); Fairfield Co., April (N); Greenville Co., August (N). **TENNESSEE**, Blount Co., June (N); Hawkins Co., August (N); Polk Co., August (N); Sevier Co., May (N)¹, July (A), August (N); Unicoi Co., August (N).

Ephemerella doris Traver

Physiographic provinces: CP, P, BR, VR

Previously published state records: Ala., Trav., 1937; Ga., NTH, 1935, AE, 1963; N. C., NTH, 1935, Trav., 1937, H, 1941, AE, 1963; Tenn., WB, 1949.

Additional records: **ALABAMA**, Baldwin Co., June (N); Bibb Co., March (N)²; Cherokee Co., June (N); Lowndes Co., March (N)³; Thomas Co., April (N)³. **LOUISIANA**, Lincoln Co., February, March, 1952 (N). **NORTH CAROLINA**, McDowell Co., April (N); Orange Co., May (N). **SOUTH CAROLINA**, Aiken Co., May (A); Allendale Co., January (N)²; Kershaw Co., April (N); Orangeburg Co., April (A). **TENNESSEE**, Cocke Co., April (N); Hardin Co., June (N).

Ephemerella dorothaea Needham

Physiographic provinces: P, BR

Previously published state records: Fla., Sch, 1967; N. C., McD., 1931, NTH, 1935, Trav., 1937, AE, 1965; S. C., NTH, 1935; Tenn., McD., 1931, NTH, 1935, WB, 1949, AE, 1965.

Additional records: **GEORGIA**, Union Co., May (A)³. **NORTH CAROLINA**, Avery Co., April (N); Buncombe Co., May (N); Macon Co., July, August (N); McDowell Co., May (N); Swain Co., April, May (N); Transylvania Co., May, June, July (N). **SOUTH CAROLINA**, Edgefield Co., April (A,N); Fairfield Co., April (N); Greenville Co., May, June, September (A)⁴; Laurens Co., April (N); Newberry Co., April (N). **TENNESSEE**, Cocke Co., June (A).

Ephemerella frisoni McDunnough

Physiographic provinces: ILP

Previously published state records: Ala., BA, 1961

Additional records: None

Ephemerella funeralis McDunnough

Physiographic provinces: BR, VR, ILP

Previously published state records: Ga., NTH, 1935; N. C., Trav., 1937, H, 1941, EA, 1963; S. C., NTH, 1935; Tenn., AE, 1963.

Additional records: **NORTH CAROLINA**, Haywood Co., July (N); Macon Co., January (N); McDowell Co., April (N). **TENNESSEE**, Cheatham Co., April (N); Knox Co., February (N); Sevier Co., May (N)¹, December (N).

Ephemerella hispida Allen and Edmunds

Physiographic provinces: BR

Previously published state records: N. C., AE, 1965; Tenn., AE, 1965.

Additional records: **NORTH CAROLINA**, Swain Co., May (N).

Ephemerella inconstans Traver

Physiographic provinces: P, BR

Previously published state records: N. C., Trav., 1932, NTH, 1935 (as *E. vernalis*). H, 1941, AE, 1965; Tenn., WB, 1949 (As *E. vernalis*).

Additional records: **GEORGIA**, Cobb Co., March (N); Fulton Co., April (A)³; Greene Co., April (A)³. **NORTH CAROLINA**, Jackson Co., June (A); Macon Co., June (N). **TENNESSEE**, Greene Co., April (A).

Ephemerella invaria (Walker)

Physiographic provinces: BR, VR, AP

Previously published state records: Ala., AE, 1965; Ga., AE, 1965; N. C., AE, 1965; Tenn., AE, 1965.

Additional records: **GEORGIA**, Rabun Co., May (N). **NORTH CAROLINA**, Swain Co., April (N).

TENNESSEE, Blount Co., April (N); Grainger Co., April (N); Greene Co., August (N); Moore Co., April (N); Sevier Co., May (N)¹.

Ephemerella lata Morgan

Physiographic provinces: BR

Previously published state records: N. C., NTH, 1935, Trav., 1937, AE, 1962; Tenn., WB, 1949, Burks, 1953.

Additional records: GEORGIA, Lumpkin Co., July (A)³. NORTH CAROLINA, Macon Co., July (N); Transylvania Co., August (N).

Ephemerella lita Burks

Physiographic provinces: BR

Previously published state records: N. C., AE, 1962

Additional records: NORTH CAROLINA, Macon Co., June, July (N).

Ephemerella longicornis Traver

Physiographic provinces: BR

Previously published state records: N. C., NTH, 1935, Trav., 1937, H, 1941, AE, 1962; Tenn., AE, 1962.

Additional records: NORTH CAROLINA, Macon Co., July (N); Transylvania Co., June (N); Yancey Co., July (N).

Ephemerella lutulenta Clemens

Physiographic provinces: BR, AP, ILP

Previously published state records: N. C., NTH, 1935; Tenn., WB, 1949.

Additional records: NORTH CAROLINA, Swain Co.; April (N), May (N)¹. TENNESSEE, Cumberland Co., April (N); Davidson Co., May (N); Putnam Co., April (N).

Ephemerella minimella McDunnough

Physiographic provinces: P, BR, VR, ILP

Previously published state records: N. C., NTH, 1935; Tenn., WB, 1949.

Additional records: NORTH CAROLINA, Macon Co., August (N). SOUTH CAROLINA, Lexington Co., April (N). TENNESSEE, Cheatham Co., April (N); Grainger Co., April (N); Greene Co., April (N); Meigs Co., April (N).

Ephemerella needhami McDunnough

Physiographic provinces: P, AP

Previously published state records: None

Additional records: ALABAMA, DeKalb Co., April (N). SOUTH CAROLINA, Edgefield Co., April (N).

Ephemerella prudentalis McDunnough

Physiographic provinces: CP

Previously published state records: N. C., AE, 1963

Additional records: None

Ephemerella rossi Allen and Edmunds

Physiographic provinces: BR

Previously published state records: Tenn., AE, 1965

Additional records: NORTH CAROLINA, Swain Co., April May (N); Transylvania Co., May, July (N); Yancey Co., July (N). TENNESSEE, Blount Co., June (N); Sevier Co., May (N).

Ephemerella rotunda Morgan

Physiographic provinces: CP, P, BR, AP

Previously published state records: Fla., Ber., 1958, Sch, 1967; N. C., NTH, 1935, Trav., 1937, H, 1941, Burks, 1953, AE, 1965.

Additional records: FLORIDA, Gadsden Co., March (A); Liberty Co., March (N). GEORGIA, Rabun Co., June (A)³. NORTH CAROLINA, Buncombe Co., May (N); Macon Co., April (N); McDowell Co., April (N); Transylvania Co., March (N); Watauga Co., February (N); Yadkin Co., February (N). SOUTH CAROLINA, Aiken Co., May (N). TENNESSEE, Cumberland Co., July (N); Sevier Co., April (N).

Ephemerella septentrionalis McDunnough.

Physiographic provinces: BR

Previously published state records: N. C., Trav., 1937, AE, 1965.

Additional records: GEORGIA, May (A); NORTH CAROLINA, Buncombe Co., May (N); McDowell Co., April (N); Transylvania Co., May (N).

Ephemerella serrata Morgan

Physiographic provinces: BR

Previously published state records: N. C., NTH, 1935, AE, 1963.

Additional records: NORTH CAROLINA, Macon Co., July (A), Swain Co., July (N,A), August (A).

Ephemerella serratooides McDunnough

Physiographic provinces: CP, P, BR, VR, AP, ILP

Previously published state records: N. C., NTH, 1935, AE, 1963; Tenn., AE, 1963.

Additional records: ALABAMA, Coosa Co., June (N); Shelby Co., June (N); GEORGIA, Baker Co., May (N); Cherokee Co., June, July, August (N); Lumpkin Co., July, August (N); Pickens Co., June (N); NORTH CAROLINA, Graham Co., August (N); Macon Co., August (N); Polk Co., July (N); Randolph Co., July (N); Swain Co., June, July (A), August (N); Transylvania Co., June (N); Union Co., July (N); SOUTH CAROLINA, Greenville Co., August (N); TENNESSEE, Franklin Co., April (N); Robertson Co., June (N); Sevier Co., July (N); Unicoi Co., August (N).

Ephemerella simplex McDunnough

Physiographic provinces: CP, P, BR, AP

Previously published state records: Fla., Ber., 1958; Ga.-S. C., PCR, 1967; N. C., NTH, 1935, Burks, 1953, AE, 1962.

Additional records: ALABAMA, Macon Co., April (N); Tuscaloosa Co., April (N), May (A,N); FLORIDA, Liberty Co., March (N); GEORGIA, Macon Co., April (N); NORTH CAROLINA, Jackson Co., June (N); Macon Co., June, August (N); Swain Co., May (N)¹, June (N); Wake Co., May (N); SOUTH CAROLINA, Edgefield Co., April (A,N); Fairfield Co., April (N); Laurens Co., April (N); Lexington Co., April (N).

Ephemerella sordida McDunnough

Physiographic provinces: CP, BR, AP

Previously published state records: N. C., AE, 1963

Additional records: ALABAMA, Perry Co., May (N); Walker Co., June (N); NORTH CAROLINA, Macon Co., July (A); TENNESSEE, Cumberland Co., July (N).

Ephemerella species

Physiographic provinces: CP, BR, AP

Previously published state records: N. C., AE, 1963

Additional records: FLORIDA, Liberty Co., March (N); GEORGIA, Baker Co., March (A); Bibb Co., April (N)²; Burke Co., June (N); Carroll Co., March (N); Cherokee Co., June (N,A), August (A); Dawson Co., June (N); Fulton Co., March, April (A); Gilmer Co., June (A)³; Habersham Co., August (A)⁴; Lumpkin Co., August (N); Pickens Co., June (N); Rabun Co., April (N), July (N), August (N); Richmond Co., April (A); Sumter Co., August (N); White Co., July (A); NORTH CAROLINA, Clay Co., April (N); Jackson Co., August (A); Macon Co., June (N,A), July (N), August (A); Swain Co., May, June (N)⁵, April, December (N); Transylvania Co., July (N); Wake Co., May (N); Yancey Co., May (N); SOUTH CAROLINA, Aiken Co., May (A); Oconee Co., August (N); Orangeburg Co., April (A), October (N); Pickens Co., April (N)⁶; TENNESSEE, Fentress Co., May (A); Greene Co., May (A); Sevier Co., May (N)⁷, April, June, December (N).

Ephemerella spiculosa Berner and Allen

Physiographic provinces: BR

Previously published state records: N. C., BA, 1961, AE, 1963; Tenn., BA, 1961, AE, 1963.

Additional records: NORTH CAROLINA, Macon Co., July (N); TENNESSEE, Greene Co., August (N).

Ephemerella subvaria McDunnough

Physiographic provinces: BR

Previously published state records: None

Additional records: NORTH CAROLINA, Swain Co., April (N).

Ephemerella temporalis McDunnough

Physiographic provinces: BR

Previously published state records: Ga., NTH, 1935; N. C., NTH, 1935, Trav., 1937, AE, 1963; S. C., AE, 1963.

Additional records: GEORGIA, Habersham Co., July (A)³; NORTH CAROLINA, Macon Co., July (N).

Ephemerella trilineata Berner

Physiographic provinces: CP, VR, AP

Previously published state records: Fla., Ber., 1950 and 1958, AE, 1963, PJ, 1973, Ga., Sch, 1967; Ber., 1958.

Additional records: ALABAMA, Escambia Co., April, June (N); Mobile Co., June (N), Tuscaloosa Co., May, June (N). FLORIDA, Alachua Co., January (N), April (A); Baker Co., February (N); Bay Co., April (N); Clay Co., January (N); Columbia Co., November (N); Escambia Co., March, April (N); Gadsden Co., March, April (N,A); Gulf Co., April (N,A); Jackson Co., April (A); Lake Co., December (N); Liberty Co., March (A); Madison Co., January (N); Manatee Co., February (N); Okaloosa Co., April (A), March, April (N), May (A); Walton Co., April (A), April (N). GEORGIA, Berrien Co., March (N); Burke Co., May (A)², October, November, December (N); Charlton Co., February (N); Chattahoochee Co., April (N); Decatur Co., April (N); Houston Co., April (A); Lowndes Co., February (A), March (A,N); Whitfield Co., May (A)³. LOUISIANA, Lamar Co., May (N); Tangipahoa Co., June (N); Washington Co., August (N). MISSISSIPPI, Lamar Co., May (N). SOUTH CAROLINA, Orangeburg Co., April (A).

Ephemerella tuberculata Morgan

Physiographic provinces: BR

Previously published state records: N. C., NTH, 1935, Trav., 1937 (as *E. cherokee*), Burks, 1953, AE, 1962; Tenn., Burks, 1953, AE, 1962.

Additional records: GEORGIA, Cherokee Co., June (N); Lumpkin Co., April (N); Union Co., June (A)². NORTH CAROLINA, Jackson Co., June (N); Macon Co., July (N); Swain Co., August (N); Transylvania Co., July (N). TENNESSEE, Sevier Co., August (N).

Ephemerella walkeri Eaton

Physiographic provinces: BR

Previously published state records: None

Additional records: NORTH CAROLINA, Buncombe Co., April (N)¹ (identified as *E. simplex* by Burks)

Ephemerella wayah Traver

Physiographic provinces: BR

Previously published state records: N. C., NTH, 1935, TH, 1941, AE, 1962

Additional records: GEORGIA, Rabun Co., July (A)³; NORTH CAROLINA, Macon Co., June (N); Swain Co., June, July (N); Transylvania Co., June (N); Yancey Co., July (N). TENNESSEE, Blount Co., June (N).

FAMILY TRICORYTHIDAE
SUBFAMILY LEPTOHYPHINAE
GENUS *Leptohypes* EATON

Leptohypes dolani Allen

Physiographic provinces: CP, P

Previously published state records: Ga.-S. C. state line, A, 1967.

Additional records: GEORGIA, Burke Co., August (N), October (N)²; Effingham Co., July (N). SOUTH CAROLINA, Aiken Co., July, September (N)²; Newberry Co., August (N).

Leptocephyes robacci Allen

Physiographic provinces: CP

Previously published state records: Ga.-S. C. state line, A, 1967.

Additional records: None

GENUS *Tricorythodes* ULMER*Tricorythodes albilineatus* Berner

Physiographic provinces: CP, VR

Previously published state records: Ala., Ber., 1958; Fla., Ber., 1950 and 1958, PJ, 1973, Sch, 1967; Ga., Ber., 1958.

Additional records: ALABAMA, Bibb Co., Escambia Co., June (N); Henry Co., June (N). FLORIDA, Alachua Co., October (N); Escambia Co., October (A); Hamilton Co., July (A); Levy Co., November (N); Liberty Co., June (A); Santa Rosa Co., August (N). GEORGIA, Burke Co., July-September (N); Decatur Co., June (A); Effingham Co., July (N); Monroe Co., July (N,A); Muscogee Co., June (N).

Tricorythodes alectus (Needham)

Physiographic provinces: BR

Previously published state records: None

Additional records: NORTH CAROLINA, Macon Co., August (A).

Tricorythodes atratus (McDunnough)

Physiographic provinces: BR

Previously published state records: None

Additional records: TENNESSEE, Sevier Co., August (A).

Tricorythodes species

Physiographic provinces: CP, P, BR, VR, AP, ILP

Additional records: ALABAMA, Bibb Co., May, June (N); Chilton Co., June (N); Coosa Co., June (N); Covington Co., July (N); Dallas Co., June (N); DeKalb Co., July (N); Elmore Co., June (N); Lauderdale Co., June (N); Macon Co., June (N); Marion Co., June (N); Perry Co., May, June (N); Randolph Co., June (N); Walker Co., June (N). GEORGIA, Baker Co., May (N,A); Bibb Co., July (N); Cherokee Co., June, July, August (N); Dawson Co., June (N); Decatur Co., July (N)³; August (N); Hancock Co., August; Hart Co., September (N); Heard Co., July (N); Lumpkin Co., August (N); Monroe Co., July (N); Newton Co., July (N); Wilkes Co., July (N). LOUISIANA, St. Helena Par., August (N); Tangipahoa Par., August (N). MISSISSIPPI, Amite Co., June (N); Clark Co., August (N); Clay Co., July (N); Copiah Co., August (N); Franklin Co., June, August (N); Harrison Co., August (N); Itawamba Co., July (N); Lafayette Co., July (N); Lamar Co., August (N); Lauderdale Co., June, July (N); Lawrence Co., August (N); Lowndes Co., June (N); Monroe Co., July (N); Pike Co., August (N); Rankin Co., April (N); Smith Co., August (N); Sunflower Co., July (N). NORTH CAROLINA, Caswell Co., July (N); Davidson Co., July (N); Forsyth Co., June (N); Graham Co., August (N); Macon Co., August (N,A); Person Co., July (A); Transylvania Co., August (N); Wilkes Co., June (N). SOUTH CAROLINA, Aiken Co., July (N); Edgefield Co., July (N); Lancaster Co., June, July (N); Laurens Co., August (N); McCormick Co., July (N); Newberry Co., August (N); Oconee Co., August (N); Orangeburg Co., October (N); Pickens Co., August (N); Spartanburg Co., August (N). TENNESSEE, Dickson Co., June (N,A); Giles Co., July (N); Greene Co., August (N); Houston Co., July (N); Lincoln Co., July (N); Moore Co., July (N); Robertson Co., June, July, August (N); Rutherford Co., July (N); Sumner Co., June (N); Warren Co., June (N).*Tricorythodes stygiatus* McDunnough

Physiographic provinces: BR

Previously published state records: None

Additional records: NORTH CAROLINA, Macon Co., August (A).

Tricorythodes texanus Traver

Physiographic provinces: CP

Previously published state records: None
 Additional records: MISSISSIPPI, Marion Co., August (N,A).

SUPERFAMILY EPHEMEROIDEA
FAMILY BEHNINGIIDAE
SUBFAMILY BEHNINGIINAE
GENUS Dolania EDMUNDS AND TRAVER

Dolania americana Edmunds and Traver

Physiographic provinces: CP

Previously published state records: Fla., PJ, 1973; Sch., 1987; S.C., ET, 1959; PCR, 1967.
 Additional records: FLORIDA, Okaloosa Co., May (N,A), August (N); Santa Rosa Co., February
 August (N). SOUTH CAROLINA, Aiken Co., (N)²; Allendale Co., no date (N)².

FAMILY POTAMANTHIDAE
SUBFAMILY POTAMANTHINAE
GENUS Potamanthus PICTET

Potamanthus distinctus Traver

Physiographic provinces: BR, VR

Previously published state records: Ga., McC., 1975; N.C., Trav., 1937; Tenn., McC., 1975.
 Additional records: GEORGIA, Chatoga Co., June (A)¹; Fannin Co., June (A)²; White Co.,
 July and August (A). NORTH CAROLINA, McDowell Co., April (N), Watauga Co., July
 (A). TENNESSEE, Sevier Co., July (A), August (N,A), August (A).

Potamanthus myops (Walsh)

Physiographic provinces: ILP

Previously published state records: Tenn., McC., 1975.
 Additional records: TENNESSEE, Davidson Co., June (A)

Potamanthus neglectus Traver

Physiographic provinces: CP, ILP

Previously published state records: Miss., McC., 1975; Tenn., McC., 1975.
 Additional records: None.

Potamanthus rufous Argo

Physiographic provinces: VR

Previously published state records: Tenn., McC., 1975.
 Additional records: TENNESSEE, Hamilton Co., August (A).

Potamanthus species

Physiographic provinces: P, BR, VR, ILP

Additional records: GEORGIA, Catoosa Co., June (A)¹; Cherokee Co., June (N); Hall Co., July
 (A)²; Pickens Co., June (N). NORTH CAROLINA, Watauga Co., February (N). TENNESSEE,
 Rutherford Co., July (N); Unicoi Co., August (N).

Potamanthus verticis (Say)

Physiographic provinces: CP, ILP

Previously published state records: Miss., McC., 1975; Tenn., NTH, 1935.

Additional records: MISSISSIPPI, Lawrence Co., August (A); Lowndes Co., June (A); Pike
 Co., August (A). TENNESSEE, Cheatham Co., July (A); Davidson Co., June (A); Lincoln
 Co., July (A).

FAMILY EPHemeridae
SUBFAMILY EPHemerinae
GENUS *Ephemera* LINNAEUS

Ephemera blanda Traver

Physiographic provinces: BR, VR

Previously published state records: Ga., NTH, 1935; N. C., NTH, 1935; S. C., NTH, 1935.

Additional records: GEORGIA, Dawson Co., June (N); Gilmer Co., July (A)¹, June (A)²; Habersham Co., July (A); Lumpkin Co., August (A); Rabun Co., June (A); Union Co., July (A)³; White Co., July (A)⁴, July, August (A). NORTH CAROLINA, Macon Co., July (A), June (N,A); McDowell Co., April (N); Swain Co., August (N). SOUTH CAROLINA, Greenville Co., May, June (A)⁴.

Ephemera guttulata Pictet

Physiographic provinces: BR, AP

Previously published state records: Ga., McC., 1975; N. C., NTH, 1935, Trav., 1937; S. C., McC., 1975; Tenn., Kenn., 1926, WB, 1949.

Additional records: GEORGIA, Lumpkin Co., May (A)⁵. NORTH CAROLINA, Swain Co., August (N). TENNESSEE, Cumberland Co., July (N); Greene Co., May (N,A); Morgan Co., July (N); Sevier Co., August (N); Unicoi Co., June (A), August (N).

Ephemera stimulans Walker

Physiographic provinces: P

Previously published state records: Fla., Ber., 1950 (very doubtful record); S. C., McC., 1975. Additional records: SOUTH CAROLINA, Fairfield Co., April (A).

Ephemera species

Physiographic provinces: CP, BR, VR, AP, ILP

Additional records: ALABAMA, Winston Co., August (N). GEORGIA, Fannin Co., June (N)³; Screven Co., July (N). NORTH CAROLINA, Buncombe Co., May (N); Macon Co., July (N); Polk Co., July (N); Transylvania Co., June (N); Watauga Co., February, July, August (N). SOUTH CAROLINA, Oconee Co., August (N). TENNESSEE, Lincoln Co., April (N); Marion Co., April (A)¹, April (A); Sevier Co., December (N).

Ephemera varia Eaton

Physiographic provinces: P, BR, AP, ILP

Previously published state records: Ga., McC., 1975; N. C., McC., 1975; Tenn., WB, 1949.

Additional records: GEORGIA, Rabun Co., July August (N). NORTH CAROLINA, Jackson Co., July (A), August (N,A); Macon Co., June-August (N), June, August (A); Randolph Co., July (N); Watauga Co., July (A), June (N). TENNESSEE, Cumberland Co., July (N); Dickson Co., July (N); Greene Co., May (N,A), June, July, September (A); Rutherford Co., July (N); Sevier Co., April (N); Unicoi Co., June (A); Wayne Co., July (N).

GENUS *Hexagenia* WALSH

Hexagenia atrocaudata McDunnough

Physiographic provinces: BR., VR

Previously published state records: Ga., NTH, 1935; N. C., NTH, 1935; S. C., PCR, 1967 (doubtful identification); Tenn., WB, 1949.

Additional records: GEORGIA, Bartow Co., August (A)²; Floyd Co., August (A)²; NORTH CAROLINA, Watauga Co., August (A). TENNESSEE, Unicoi Co., August (A).

Hexagenia bilineata (Say)

Physiographic provinces: CP, P, BR, VR, AP, ILP

Previously published state records: Ala., Trav., 1937; Spieth, 1941; Fla., Ber., 1950 and 1958, Sch., 1967; Ga., NTH, 1935; Spieth, 1941; Ber., 1958; La., Eaton, 1883; Spieth, 1941; Miss.,

NTH, 1935; Spieth, 1941; Ber., 1957; N. C., McC., 1975; S. C., PCR, 1967 (questionably); McC., 1975; Tenn., NTH, 1935; Spieth, 1941; WB, 1949.

Additional records: ALABAMA, Baldwin Co., June (A); Chilton Co., June (A); Clarke Co., May (A); Colbert Co., August (A)²; Lauderdale Co., August (A)²; July (A), June (A); Washington Co., May (A). FLORIDA, Gadsden Co., June (A); Jackson Co., July (A). GEORGIA, Catoosa Co., June (A)³; Cherokee Co., June (A); Clark Co., July (A); Cobb Co., July (A)³; Crawford Co., June (A)³; Decatur Co., June (A); Dougherty Co., June, July (A)³; Floyd Co., June, July (A)³; Fulton Co., July, August (A)¹; July (A)³; Gordon Co., July (A)³; Habersham Co., July (A)³; Harris Co., July (A)³; Macon Co., July (A); Screven Co., July (A); Taylor Co., June (A)³; Upson Co., June (A)³; LOUISIANA, Beauregard Par., June (A); East Baton Rouge Par., April and May (A); Tangipahoa Par., June (A). MISSISSIPPI, Lawrence Co., August (A); Monroe Co., July (A). NORTH CAROLINA, Macon Co., June (A), July (A); Swain Co., August (A). SOUTH CAROLINA, Abbeville Co., June (A); Aiken Co., July (N,A)⁴; Anderson Co., June (A)⁴. TENNESSEE, Benton Co., August (A); Davidson Co., July (A); Fentress Co., July (A); Greene Co., June, July, August, (A); Hamblen Co., August (A); Hamilton Co., August (A); Hardin Co., July (A); Humphreys Co., June (A); Lincoln Co., July (A).

Hexagenia limbata occulta (Walker)

Physiographic provinces: BR

Previously published state records: N. C., Spieth, 1941.

Additional records: None

Hexagenia limbata venusta Eaton

Physiographic provinces: CP, P, AP, VR, ILP

Previously published state records: Tenn., Spieth, 1941.

Additional records: ALABAMA, Walker Co., June (A). GEORGIA, Bartow Co., June (A)³; Decatur Co., April, June (A)³; Fannin Co., July (A)³; Floyd Co., June (A)³; Monroe Co., September (A)³. LOUISIANA, East Baton Rouge Par., May (A); Vermillion Par., July (A). MISSISSIPPI, Laurence Co., August (A). TENNESSEE, Humphreys Co., June (A); Sumner Co., June (N).

Hexagenia munda elegans Traver

Physiographic provinces: CP, P, BR, VR, AP, ILP

Previously published state records: Ala., Spieth, 1941; Ber., 1958; Fla., NTH, 1935 (as *H. weewa*), Spieth, 1941; Ber., 1950 and 1958; Sch., 1967; Ga., NTH, 1935; Trav., 1937 (as *H. kanuga*), Spieth, 1941; S. C., Trav., 1937 (as *H. kanuga*), Spieth, 1941.

Additional records: ALABAMA, Baldwin Co., August (N); Barbour Co., June (N); Bibb Co., June (A); Cherokee Co., July (A); Chilton Co., June (A); Covington Co., July (N); Elmore Co., June (A); Henry Co., June (N); Lauderdale Co., August (A)²; Macon Co., June (A); Perry Co., June (A); Pike Co., June (N); Walker Co., June (A). FLORIDA, Alachua Co., May-October (A); October (N); Columbia Co., April (N), May (A); Escambia Co., August (A); October (N); Gadsden Co., April (N), June (A); Hillsborough Co., June (A); Levy Co., July (A); Liberty Co., March, June (N); Okaloosa Co., April, May, July (A); Santa Rosa Co., June, August (A); Walton Co., April, July, August, October (A). GEORGIA, Bartow Co., August (A)¹⁻²; Bibb Co., August (A)¹; Clarke Co., June, August (A)²; Clayton Co., June (A)³; Crawford Co., June (A)³; Dougherty Co., July (A)³; November (N); Decatur Co., June-August (A); Floyd Co., August (A)³; Fulton Co., July, August (A)²; Gordon Co., July (A)¹; Grady Co., November (N); Jefferson Co., July (A)¹; Lowndes Co., March (N); Lumpkin Co., August (N); Macon Co., July (A); Newton Co., July (N); Pickens Co., June (N); Rabun Co., June (A)³; Screven Co., July (A); Ware Co., April (N); White Co., July, August (A). LOUISIANA, East Baton Rouge Par., April, May (A); St. Tammany Par., June (A); Tangipahoa Par., August (N). MISSISSIPPI, Clark Co., August (N); Forrest Co., August (A); Lamar Co., June, August (A); Lauderdale Co., June, July (N,A); Marion Co., May (A). NORTH CAROLINA, Transylvania Co., August (A); Wake Co., May (A). SOUTH CAROLINA, Aiken Co., July, August (A)²; Florence Co., May (A)⁴; Lexington Co., April (N); Oconee Co., August (N). TENNESSEE, Cheatham Co., July (A); Davidson Co., July (A); DeKalb Co., July (A); Greene Co., July (A); Hamblen Co., August (A); Hamilton Co., August (A); Lincoln Co., July (A); Robertson Co., June (N).

Hexagenia munda marilandica Traver

Physiographic provinces: CP, P, BR, VR, AP, ILP

Previously published state records: Ala., Spieth, 1941; Fla., Spieth, 1941; Ber., 1950 and 1958; PJ, 1973; Sch., 1967; Ga., NTH, 1935 (as *H. carolina* and *H. marilandica*), Spieth, 1941; Ber., 1958; N. C., NTH, 1935 (as *H. carolina* and *H. rosacea*), Trav., 1937 and H., 1941 (as *H. carolina*), Spieth, 1941; S. C., Trav., 1937 (as *H. carolina*), Spieth, 1941.

Additional records: ALABAMA, Elmore Co., June (N,A); Talladega Co., June (A); Tallapoosa Co., June (N). FLORIDA, Liberty Co., March (N); GEORGIA, Bartow Co., July (A)³; Bibb Co., July (A); Calhoun Co., June (A)³; Cherokee Co., June, August (A), June (N), July (A)³; Clayton Co., June (A)³; Cobb Co., July (A); Coweta Co., June (A)³; Crawford Co., June (A); Dawson Co., June (N,A); Floyd Co., (A); Fulton Co., June, July, September (A)³; Gordon Co., June (A)³; Gwinnett Co., July (A)³; Johnson Co., August (N); Lumpkin Co., August (A)³; Murray Co., July (A); Muscogee Co., June (A); Oconee Co., June (A)³; Polk Co., June (A)³; Rabun Co., July (N); Stephens Co., July (A)^{1,3}; Taylor Co., July, August (A); Thomas Co., June (A)³; Troup Co., June (A)³; Upson Co., June (A)³; Walton Co., June (A)³; White Co., July, August (A). NORTH CAROLINA, Granville Co., July (N); Jackson Co., July (N); Macon Co., June (N,A), July (A), August (N); Rockingham Co., July (A); Swain Co., June, July (A); Transylvania Co., August (A); Wiles Co., June (N). SOUTH CAROLINA, Aiken Co., June, July (A)²; Anderson Co., July (N); Greenville Co., June (N)⁴, July (N); Oconee Co., August (N); Spartanburg Co., June (A).

Hexagenia munda munda Eaton

Physiographic provinces: BR, VR, ILP

Previously published state records: N. C., Spieth, 1941.

Additional records: ALABAMA, Cleburne Co., July (A). TENNESSEE, Davidson Co., July (A).

Hexagenia munda orlando Traver

Physiographic provinces: CP

Previously published state records: Ala., Trav., 1937; Fla., NTH, 1935, Spieth, 1941, Ber., 1950.

Additional records: FLORIDA, Bradford Co., May (A); Clay Co., July (N), June, August (A); Highlands Co., March, April, July, October (A); Hillsborough Co., October (A), December (N); Lake Co., April (A); Marion Co., September (A); Polk Co., March (N), April (A); Putnam Co., June (A).

Hexagenia rigida McDunnough

Physiographic provinces: VR, ILP

Previously published state records: Tenn., McC., 1975

Additional records: TENNESSEE, Davidson Co., June, July (A); Hamblen Co., August (A); Hamilton Co., August (A).

Hexagenia species

Physiographic provinces: CP, P, BR, VR, AP, ILP

Additional records: ALABAMA, Elmore Co., April (N). FLORIDA, Gadsden Co., April (N); Liberty Co., April (N). GEORGIA, Bartow Co., June, July, August (A)³; Burke Co., May (N)², September (N); Calhoun Co., August (N); Colquitt Co., October (N); Chattahoochee Co., April (N); Cherokee Co., June, July (A)³, August (N); Crawford Co., June (A)³; Cowetta Co., June (N)³; Decatur Co., June (A), June, October (N), August (A)¹; Dooley Co., November (N); Early Co., October (N); Floyd Co., June (A)³; Fulton Co., June, July (A)³; Gilmer Co., June (A)³; Gordon Co., July (N)³; Gwinnett Co., June, July (A)³; Habersham Co., July (A)³; Hall Co., July (A)³; Lumpkin Co., July, September (A)³; Miller Co., June (N)³; Monroe Co., (N); Murray Co., August (N); Peach Co., April (N); Pickens Co., June (A)³; Rabun Co., July (N); Richmond Co., June (A)³; Sumter Co., June (N)³; Troup Co., June (A)³; Union Co., July (A)³; Walton Co., August (A)³; White Co., July (N,A)³; Whitfield Co., August (A)³. NORTH CAROLINA, Davidson Co., July (N); Henderson Co., July (N); McDowell Co., July, August (N); Transylvania Co., July (N); Watauga Co., August (N). SOUTH CAROLINA, Aiken Co., January, May (N)²; Allendale Co., May (N)²; Greenville Co., August (A)⁴, August (N); Kershaw Co., July (A)⁴; Pickens Co., July (N).

GENUS *Litobrancha* McCAFFERTY

Litobrancha recurvata (Morgan)

Physiographic provinces: BR

Previously published state records: N. C., Spieth, 1941, Burks, 1953; Tenn., WB, 1949.

Additional records: NORTH CAROLINA, Avery Co., August (N); Macon Co., June, July (N); Watauga Co., August (N). TENNESSEE, Greene Co., March (N).

GENUS *Pentagenia* WALSH

Pentagenia vittigera (Walsh)

Physiographic provinces: CP, BR

Previously published state records: Ala., Trav., 1937; Fla., Ber., 1950 and 1958, Sch, 1967; Ga., McC., 1975; La., McC., 1975; Miss., McC., 1975; Tenn., NTH, 1935.

Additional records: ALABAMA, Dallas Co., May, June (A); Washington Co., May (A). FLORIDA, Gadsden Co., June (A). GEORGIA, Baker Co., no date (A)¹; Effingham Co., July (N). LOUISIANA, East Baton Rouge Par., September (A). MISSISSIPPI, Lawrence Co., August (A). TENNESSEE, Shelby Co., June (A).

FAMILY POLYMITARCIDAE

SUBFAMILY POLYMITARCINAE

GENUS *Ephoron* WILLIAMSON

Ephoron leukon Williamson

Physiographic provinces: CP, P, BR, AP, ILP

Previously published state records: Ga., McC., 1975; Miss., McC., 1975; N. C., McC., 1975; S. C., McC., 1975; Tenn., NTH, 1935, WB, 1949.

Additional records: GEORGIA, Cherokee Co., June (N), August, July (A); Cobb Co., July (A). MISSISSIPPI, Covington Co., August (N); Forrest Co., August (A); Itawamba Co., July (N,A); Lauderdale Co., June, July (N); Lowndes Co., June (A); Monroe Co., July (A). NORTH CAROLINA, Caldwell Co., July (N); Randolph Co., July (N). SOUTH CAROLINA, Aiken Co., July (A)², May (N)²; Chesterfield Co., July (A); Darlington Co., July (A). TENNESSEE, Cheatham Co., July (A); Fentress Co., August (A); Giles Co., July (N); Greene Co., July-August (A); Lincoln Co., July (A); Robertson Co., July (N,A), June (N); Rutherford Co., July (N); Sevier Co., August (A); Unicoi Co., July (A).

Ephoron species

Physiographic provinces: CP, AP

Additional records: ALABAMA, Perry Co., June (N); Walker Co., June (N).

SUBFAMILY CAMPSURINAE

GENUS *Tortopus* NEEDAM AND MURPHY

Tortopus incertus Traver

Physiographic provinces: CP

Previously published state records: Ala., NTH, 1935; Fla., Ber., 1950 and 1958; Ga., NTH, 1935, Ber., 1958, Ga.-S. C. state lines, SBH, 1959, PCR, 1967; La., Ber., 1959; Miss., Ber., 1959; S. C., Ber., 1959.

Additional records: FLORIDA, Escambia Co., August (A). GEORGIA, Bibb Co., August (A); Decatur Co., July, August (A)²; Doughtery Co., no date (A)³; Effingham Co., July (N,A); Richmond Co., no date (A). MISSISSIPPI, Forrest Co., August (A); Itawamba Co., August (A); Monroe Co., July (A); Pike Co., August (A); Smith Co., August (A). SOUTH CAROLINA, Aiken Co., July, August (A)²; Allendale Co., July, August (N)².

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