An Annotated List of the Spiders of Indiana¹

THOMAS A. PARKER, Purdue University

Introduction

The history of Indiana araneology began in 1847 when Nicholas Marcellus Hentz, the Father of American Araneology, described *Agalena naevia* from Indianapolis (29). Since that time many have contributed to the list of spiders of Indiana. Notable among these contributions are the works of Fox (25), Banks (2), and Elliott (20, 21, 22).

Dr. William H. Fox published the first list of Indiana spiders (25), which was based on a collection of a chemistry professor at Purdue University, Mr. Frederick C. Test. This list included 79 species of spiders in what would today be 16 families, although family names were not used in this list.

Nathan Banks published a preliminary list of Indiana spiders in 1907 (2). This work included keys to the families and genera of spiders and, in addition, a list of species belonging to other arachnid orders. The list of spiders included 148 species found in 16 families, two species of which were described as new to science. The list was based on spiders collected by W. S. Blatchley, Mel T. Cook of Greencastle, W. J. Moenkhaus of Huntingburg, and A. M. Banta who collected spiders in Indiana caves.

In 1930 the late Dr. Frank R. Elliott published on spiders of a beechmaple forest near Richmond, Indiana (20). Combining the records of Banks with newly collected material and his beech-maple study, Elliott published a list of Indiana spiders in 1932 (21). This list contained 218 species of spiders found in 20 families.

Elliott again published a list of Indiana spiders in 1953 (22). It was based on records in the literature and newly collected material. The work of Lowrie (38, 39) on the spiders of the Chicago area dunes greatly contributed to the records of Indiana spiders. Using these records and others, Elliott assembled a list containing 303 species of spiders found in 21 families.

No major studies of the spiders of Indiana have been published since Elliott's 1953 list. This paper, then, will enlarge, correct, and update the list of Indiana spiders.

The List

The present list of Indiana spiders contains 378 species of spiders found in 29 families. The families are arranged following the system used by Kaston (32). The genera are alphabetically arranged in the families and likewise the species in the genera. Nomenclature generally follows

¹ Journal Paper No. 3771, Purdue University Agricultural Experiment Station.

that used by Kaston. Synonyms are included beneath the accepted scientific name in cases where name changes have occurred within the last twenty years. The species are numbered consecutively.

Collection records are arranged by county with the oldest record preceding all others. The counties are in bold-faced type. Usually the locality is given in parenthesis, followed by citations in which the record was found. In instances where no locality was given in the literature or where recent collectors gave no specific locality on their labels, just the citation or date collected and collector's initials are included in the parenthesis. If the record is a recent one, the collection dates and collector's initials are included. Names of collectors may be found in Appendix I.

Many of the localities recorded in the older publications no longer exist, having been incorporated into neighboring cities. Other names appearing in the literature were local names and were not formally recognized. Appendix II enables the reader to locate such places more accurately. Also included in this appendix are a few localities visited by the author or his colleagues for which a more specific geographical description was deemed necessary.

The writer's spider collection is housed in the Entomology Department at Purdue University. All identifications of recent collections were made by the writer. Some verifications were obtained from araneologists in the United States and Canada. Such determinations are credited to these men individually in the text. This list is based on records from the literature and the collection of the writer. This collection represents spiders collected during a three-year study of spiders along the Wabash and Tippecanoe Rivers, spiders sent for determination through the Cooperative Extension Service, and specimens collected by students and staff of the Entomology Department at Purdue University.

ORDER Araneida

Suborder Orthognatha

FAMILY Atypidae

1. Atypus milberti (Walckenaer), 1837

Crawford (Wyandotte Cave, Sept. 8, 2, 21, 22); Posey (New Harmony, 2, 21, 22); INDIANA (49); Warren (South Pine Creek, May 5, 1968, GRF)

FAMILY Ctenizidae

2. Aptostichus flavipes Petrunkevitch, 1925 Lawrence (Mitchell, 50, 51, 22)

Petrunkevitch (51) reported this species in his Catalogue of American Spiders, Part 1, not in his synonymic index (49), as Elliott (22) has indicated.

Pachylomerides audouini (Lucas), 1836
 Floyd (Floyd's Knobs, 45); Harrison (Corydon, May 12, 1968, CB)

The specimen from Harrison County was sent to the writer by Jack Washburn, County Agent. It was found in the driveway at the home of Cova Bates.

Suborder Labidognatha

FAMILY Dysderidae

4. Dysdera crocata C. L. Koch, 1839

Whitley (Columbia City, Aug. 28, 1967, RLG); Cass (Logansport, Mar. 30, 1967, TH)

FAMILY Segestriidae

5. Ariadna bicolor (Hentz), 1842

Tippecanoe (Lafayette, 25, 22); Crawford (Wyandotte, Apr. 17, 2, 21, 22); Lawrence (Mitchell, Apr. 2, 2, 21, 22); Parke (Mecca, Apr. 27, 2, 21, 22); INDIANA (49); Wayne (Richmond, 20, 21, 22); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22)

Elliott (22) listed this species from Wyandotte Cave. The original record of Banks (2) was from the town of Wyandotte, not the cave.

FAMILY Scytodidae

6. Scytodes thoracica (Latrielle), 1804

Wayne (Richmond, 20, 21, 22); White (Brookston, Apr. 22, 1968, TAP); Tippecanoe (West Lafayette, May 16, 1968, TAP)

FAMILY Loxoscelidae

7. Loxosceles reclusa Gertsch & Mulaik, 1940

Gibson (Princeton, 46); Harrison (Bradford, Oct. 14, 1967, TAP); Posey (Mount Vernon, Jan. 19, 1968, TAP; Poseyville, May 23, 1968, TAP); Clark (Jeffersonville, Mar. 28, 1968, TAP); Knox (Bruceville, Mar. 18, 1968, RED); Vanderburgh (Evansville, May 28, June 3, 1968, TAP); Dubois (Jasper, June 26, 1968, DJM)

FAMILY Pholcidae

8. Pholcus phalangioides (Fuesslin), 1775

Wayne (Richmond, 20, 21, 22); Steuben (Crooked Lake, 21, 22); Tippecanoe (West Lafayette, June 20, 1966, TAP)

9. Spermophora meridionalis Hentz, 1841

Tippecanoe (Ross Biological Reserve, 5)

FAMILY Theridiidae

10. Asagena americana Emerton, 1882

Tippecanoe (Lafayette, 25, 22; Ross Biological Reserve, 5; Merritt's Pine Plantation, *July 11*, 1967, RWM); Crawford (Wyandotte, *Apr. 17*, 2, 21, 22); INDIANA (49); Wayne (Richmond, 20, 21, 22)

11. Conopistha rufa (Walckenaer), 1841

Argyrodes trigonum (Hentz), 1850

Monroe (Mayfield's Cave, 4, 22; Twin Cave, 4, 21)

The Twin Cave record of Banks is from a specimen sent to him by Banta and probably is Banta's "Lower Twin Cave at Mitchell" which is in Lawrence County.

- 12. Crustulina altera Gertsch & Archer, 1942
 - C. guttata: (Emerton), 1882 (nec Theridion guttatum Wider, 1834)
 Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22; Ogden Dunes, 39, 22); Tippecanoe (Ross Biological Reserve, 5)

Elliott (21, 22) listed *Crustulina guttata* (Wider). Willis J. Gertsch considers our species separate from the European *guttata* (Wider), hence the name *altera*. Kaston (32), page 75, says, "In general appearance and structure of the genitalia this species [*C. altera*] closely resembles *guttata* (Wider), with which, in fact, it may be identical, although Dr. Gertsch thinks not."

- 13. Ctenium pumilus (Emerton), 1909 Wayne (Richmond, 20, 21, 22)
- Ctenium riparius (Keyserling), 1886
 Knox (May 26, 2, 21, 22); INDIANA (49); Wayne (Richmond, 21, 22); Porter (Ogden Dunes, 39, 22)
- Enoplognatha marmorata (Hentz), 1850
 Marion (Indianapolis, 30, 22); Tippecanoe (Lafayette, 25)
- 16. Euryopis argentea Emerton, 1882
 Porter (Ogden Dunes, 39, 22; Ind. Dunes State Park, 22);
 Tippecanoe (Ross Biological Reserve, 5)
- 17. Euryopis limbata (Walckenaer), 1841
 - E. funebris (Hentz), 1850

Tippecanoe (Lafayette, 25, 22); Posey (New Harmony, *June* 4, 2, 21, 22); Wayne (Richmond, 20, 21, 22, 39); LaPorte (Smith, 39, 22); Fountain (Attica, *Sept. 7*, 1967, TAP)

18. Latrodectus mactans (Fabricius), 1775

Tippecanoe (Lafayette, 25, 22); Crawford (Wyandotte, Sept. 9, 2, 21, 22, 35); Lawrence (Mitchell, July 15, 2, 22); Dubois (Huntingburg, 2, 21, 22); Jennings (North Vernon, Sept. 14, 2, 21, 22); Martin (Shoals, Apr. 22, 2, 21, 22, 35); Floyd (New Albany, May 5, 2, 21, 22); Clark (Charlestown, HS, 35)

Banks (2) collected this species at Wyandotte, not in Wyandotte Cave, as Elliott (22) has indicated.

19. Latrodectus variolus Walckenaer, 1837

Putnam (Greencastle, 2, 21, 22, 42); Porter (Dunes Acres, 38, 39, 42; Ogden Dunes, 39, 42); Brown (Aug. 10, 1967, May 1, 1968, JJF)

Levi (35) synonymized *Latrodectus variolus* with *L. mactans*. Actually what is now known as *L. variolus* was included in Levi's records of *L. curacaviensis*. McCrone and Levi (42) showed that *L. variolus* is a valid species based on coloration and ecology. Therefore the records

listed for Latrodectus curacaviensis for Indiana in Levi's paper are actually L. variolus and are herein listed as such.

- 20. Lithyphantes albomaculatus (DeGeer), 1778

 Porter (Dunes Acres, 38, 39; Ogden Dunes, 39)
- 21. Steatoda borealis (Hentz), 1850

Tippecanoe (Lafayette, 25, 22; Americus, Aug. 1, 1967, TAP); Putnam (Greencastle, 2, 21, 22); Wayne (Richmond, 20, 21, 22, 39); Porter (Valparaiso, 21, 22; Ogden Dunes, 39, 22); LaPorte (Smith, 39, 22); Benton (Otterbein, Apr. 29, 1968, JOS); Pulaski (Winamac, June 16, 1966, Aug. 22, 1967, TAP); Vermillion (Clinton, July 14, 1966, TAP); Fulton (Rochester, Aug. 29, 1967, TAP)

- Teutana grossa (C. L. Koch), 1838
 Tippecanoe (Ross Biological Reserve, 5)
- 23. Teutana triangulosa (Walckenaer), 1802 Tippecanoe (Lafayette, 25, 22; Ross Biological Reserve, 5); Marion (Indianapolis, Oct. 15, 1967, TAP)
- 24. Theridion alabamense Gertsch & Archer, 1942
 T. cinereum Emerton, 1913, (cinereum preoc. by Thorell, 1875)
 Lake (Miller, 53; Pine, 53); Porter (Ind. Dunes State Park, 53);
 LaPorte (Smith, 39, 22)
- 25. Theridion differens Emerton, 1882
 Marshall (Arlington, June 10, 2, 21, 22); Starke (Bass Lake, June 17, 2, 21, 22); Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Brown (Nashville, 21, 22); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22); Tippecanoe (Americus, June 23, 1966, TAP)
- 26. Theridion frondeum Hentz, 1850

Knox (Vincennes, July 10, 2, 21, 22); Posey (Grand Chain, June 3, 2, 21, 22; Mount Vernon, Aug. 17, 18, 1966, June 8, 1967, July 27, 1967, TAP), INDIANA (49), Lake (Hessville, 53; Liverpool, 53); LaPorte (Otis, 53; Smith, 39, 22; LaPorte, June 19, 1968, TAP); Porter (Woodville, 53; Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22); Wayne (Richmond, 20, 21, 22, 39); Tippecanoe (Ross Biological Reserve, 5; Americus, Aug. 1, 1967, TAP); Carroll (Delphi, July 6, 1966, TAP); Huntington (Huntington, June 29, 1966, TAP); Fountain (Attica, July 25, 28, 1967, TAP); Cass (Logansport, Aug. 3, 1967, TAP); Vermillion (Clinton, July 13, 14, 1966, July 20, 1967, TAP); Sullivan (Merom Station, July 20, 21, 1966, TAP); Gibson (Mount Carmel, July 18, 1967, TAP)

27. Theridion glaucescens Becker, 1879

T. spirale Emerton, 1882

Lake (Pine, May 25, 2, 53, 21, 22); Porter (Ind. Dunes State Park, 53); Tippecanoe (Ross Biological Reserve, 5; Americus,

June 23, 1966, Aug. 1, 1967, TAP); Huntington (Huntington, June 29, 1966, Aug. 15, 1967, TAP); Fulton (Rochester, June 6, 7, 1966, Aug. 29, 1967, TAP); Pulaski (Winamac, June 15, 1966, Aug. 22, 1967, TAP); Cass (Logansport, July 6, 1966, Aug. 3, 1967, TAP); Vermillion (Clinton, July 20, 1967, TAP); Gibson (Mount Carmel, July 18, 1967, TAP)

28. Theridion lyricum Walckenaer, 1841

T. lyra Hentz, 1850

T. kentuckyense Emerton, 1909

Monroe (Mayfield's Cave, 2, 4, 21, 22; Twin Cave, 2, 21, 22; Truett's Cave, 4, 22); INDIANA (49)

29. Theridion murarium Emerton, 1882

Tippecanoe (Lafayette, 25, 22; West Lafayette, June 18, 1968, TAP); INDIANA (49)

30. Theridion pennsylvanicum Emerton, 1913

Wayne (Richmond, 20, 21, 22); Steuben (Crooked Lake, 21, 22)

31. Theridion porteri Banks, 1897

Owen (Porter's Cave, 1, 2, 3, 6, 21, 22); Monroe (Truett's Cave, 1, 2, 6, 4, 21; Mayfield's Cave, 4, 44, 21, 22); INDIANA (49)

Blatchley (6) receives credit for a Truett's Cave record because he states, on page 204, "This species was also noted in the first room of Truett's Cave—W.S.B."

The date of the description of this species should be 1897, not 1896, as Banks (2, 3) has indicated. Banks described *Theridion porteri* in the same publication as the description of *Tegenaria cavicola*. The reader is referred to a discussion of the date change under *Tegenaria cavicola*.

32. Theridion punctosparsum Emerton, 1882

Pulaski (Winamac, June 16, 1966, TAP)

33. Theridion rupicola Emerton, 1882

LaPorte (Smith, 39, 22)

 $34. \ \ The ridion\ unimaculatum\ {\bf Emerton,\, 1882}$

LaPorte (Smith, 39, 22)

Elliott (22) copied Lowrie's record incorrectly. The record should have been *Theridion unimaculatum*, not *T. albomaculatum* as Elliott has indicated. *T. albomaculatum* occurs from Georgia, Texas, and Florida, south to Brazil.

35. Theridion tepidariorum C. L. Koch, 1841

Marion (Indianapolis, 30, 22); Tippecanoe (Lafayette, 25, 22; Americus, June 23, 1966, TAP; West Lafayette, June 20, Aug. 10, 1966, TAP); Kosciusko (2, 21, 22); Putnam (Greencastle, 2, 21, 22); Wayne (Richmond, 21, 22); Porter (Valparaiso, 21, 22); LaPorte (Smith, 39, 22); Brown (Brown Co. State Park, Sept. 13, 1966, TAP); Fulton (Rochester, July 27, 1967, TAP)

36. Theridion zelotypum Emerton, 1882

Fountain (Attica, Aug. 11, 25, 1967, TAP)

- 37. Theridula opulenta (Walckenaer), 1841 Wayne (Richmond, 20, 21, 22)
- 38. Ulesanis americana Emerton, 1882 LaPorte (Smith, 39)

FAMILY Nesticidae

39. Nesticus carteri Emerton, 1875

Harrison (Bradford Cave?, 23, 47, 48, 2, 21, 22); Owen (Porter Cave, 6, 2, 21, 22); Monroe (Coon Cave, 6, 2, 21, 22; Mayfield's Cave, 4, 22; Truett's Cave, 4, 22); Crawford (Marengo Cave, 6, 2, 21, 22); INDIANA (49)

The Bradford Cave record for this species will always remain dubious. Emerton (23) says, "A cocoon collected by Mr. Packard, from Bradford Cave, Ind., contains young, which had passed their second moult, probably of this species."

Packard (47) states, ". . . while in the Bradford Cave occurred a Nesticus thought by Mr. Emerton to be identical with Nesticus Carteri."

Packard (48) does not accept the Bradford Cave record of *Nesticus carteri* Emerton as a valid one, for on page 83 he lists, "*Nesticus carteri* Emerton, Amer. Naturalist, ix, May, 1875. Carter Caves, Kentucky."

FAMILY Linyphiidae

- 40. Bathyphantes canadensis (Emerton), 1882 Wayne (Richmond, 21, 22)
- 41. Bathyphantes concolor (Wider), 1834 Fulton (Rochester, July 27, Sept. 16, 1967, TAP)
- 42. Bathyphantes nigrinus (Westring), 1861

 Tippecanoe (Lafayette, 25, 22); Monroe (Mayfield's Cave, 4, 22); Wayne (Richmond, 20, 21, 22, 39); Porter (Dunes Acres, 38, 39, 22)
- Bathyphantes pallida (Banks), 1892
 Diplostyla nigrina Emerton, 1881 (nec Linyphia nigrina Westring)
 Tippecanoe (Americus, Sept. 7, 1967, July 4, 1968, TAP);
 Fountain (Attica, Aug. 11, 1967, TAP); Fulton (Rochester, Sept. 16, 1967, TAP)
- 44. Bathyphantoides brevis (Emerton), 1911
 Fountain (Attica, Aug. 11, 1967, TAP); Fulton (Rochester, Sept. 16, 1967, TAP)
- 45. Centromerus cornupalpis (O.P.-Cambridge), 1875 Wayne (Richmond, 20, 21, 22)
- 46. Centromerus latidens (Emerton), 1882 Spencer (Santa Claus, Apr. 4, 1966, RWM)
- 47. Florinda coccinea (Hentz), 1850 Sullivan (Merom Station, July 20, 1966, TAP)
- 48. Frontinella pyramitela (Walckenaer), 1841

 LaPorte (Smith, 39, 22); Tippecanoe (Ross Biological Reserve,

- 5); Brown (Brown Co. State Park, Sept. 13, 1966, TAP); Pulaski (Winamac, Aug. 22, 1967, TAP); Carroll (Pyrmont, July 28, 1968, RWM)
- 49. Lepthyphantes nebulosa (Sundevall), 1830 Tippecanoe (Americus, Aug. 10, 1967, TAP)
- 50. Lepthyphantes zebra (Emerton), 1882 Wayne (Richmond, 20, 21, 22)
- 51. Linyphia clathrata Sundevall, 1830 Wayne (Richmond, 20, 21, 22, 39); Porter (Ogden Dunes, 39, 22); LaPorte (Smith, 39, 22)
- 52. Linyphia maculata Emerton, 1909 LaPorte (Smith, 39, 22); Cass (Logansport, July 6, 1966, TAP)
- 53. Linyphia marginata C. L. Koch, 1834 Tippecanoe (Lafayette, 25, 22; Sept. 2, 1966, TAP); Marshall (Arlington, June 10, 2, 21, 22); Crawford (Wyondotte, Apr. 17, 2, 21, 22?); Putnam (Greencastle, 2, 21, 22); Monroe (Mayfield's Cave, 4, 22); INDIANA (49); Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22); LaPorte (Smith, 39, 22); Sullivan (Merom Station,

Banks (2) collected this species at the town of Wyandotte, not in Wyandotte Cave as Eliott (22) has indicated.

54. Linyphia weyeri Emerton, 1875

July 21, 1966, TAP)

Crawford (Marengo Cave, 44, 21, 22).

Emerton (23) and Packard (47, 48) list Linyphia subterranea Emer. from Wyandotte Cave, not L. weyeri, as Banks (3) and Elliott (22) have indicated. Linyphia weyeri Emer. was described from specimens taken in Weyer's Cave, in Augusta County, Virginia.

55. Meioneta fabra (Keyserling), 1886 Spencer (Santa Claus, June 12, 1966, RWM); Tippecanoe (Americus, Aug. 24, 1967, July 4, 1968, TAP)

56. Meioneta micaria (Emerton), 1882

Wayne (Richmond, 20, 21, 22); Tippecanoe (Americus, Aug. 10, 24, 1967, TAP); Fountain (Attica, Aug. 25, 1967, TAP); Vanderburgh (Apr. 1, 1966, RWM)

57. Meioneta unimaculata (Banks), 1892 Porter (Valparaiso, 21, 22); Tippecanoe (Americus, Aug. 10, 24, 1967, TAP); Carroll (Prymont, July 28, 1968, RWM)

58. Pityohyphantes costatus (Hentz), 1850 Linyphia phrygiana: Emerton, 1882 (nec L. phrygiana C. Koch, 1836)

Marshall (Culver, June 29, 2, 21, 22); Lake (Hessville, 53; Liverpool, 53); Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Brown (Nashville, 21, 22); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22); LaPorte (Smith, 39, 22); Putnam (Bainbridge, Apr. 23, 1967, TAP)

Chamberlin and Ivie (11) are convinced that *P. costatus* is different from the European *Linyphia phrygiana*. They state, on page 28, "This common species of the eastern United States is distinct from the European *phrygiana*, where it has been consistently placed by American authors. The above name [*P. costatus* (Hentz)], therefore, should be used."

59. Pusillia mandibulata Emerton, 1882

Linyphia pusilla (of most authors)

Tippecanoe (Lafayette, 25, 22; Americus, July 27, 1967, TAP); Wayne (Richmond, 21, 22); Porter (Dunes Acres, 38, 39, 22); Fountain (Attica, Aug. 3, 1966, July 25, 1967, TAP); Huntington (Huntington, Aug. 15, 1967, TAP)

Chamberlin and Ivie (11) say that Linyphia pusilla Sundevall, 1830 is European and does not occur in North America. They consider their Pusillia pusilla distinct from Pusillia mandibulata Emerton, 1882. Apparently what was formerly known as Linyphia pusilla is now Pusillia mandibulata in the East and their new Pusillia bonita in the West.

60. Stemonyphantes lineatus (Linnaeus), 1758

Tippecanoe (Lafayette, 25, 22); Putnam (Greencastle, 2, 21, 22); Wayne (Richmond, 21, 22)

61. Tennesseellum formicum (Emerton), 1882

Porter (Dunes Acres, 38, 39, 22); Fountain (Attica, Aug. 11, 1967, July 4, 1968, TAP)

62. Troglohyphantes cavernicolus (Keyserling), 1886

Lawrence (Donnelson's Cave, 4, Nov. 9, 2, 21, 22; Twin Caves at Mitchell, 4, 22; Shawnee Cave, 43, 44, 21, 22); INDIANA (49)

Emerton (23) did not record this species from Wyandotte Cave as Elliott (22) has indicated. McIndoo (44), on page 183, says, "This species [Linyphia Weyeri Emer.] in this cave [Marengo Cave] is as abundant as Troglohyphantes (=Willibaldia) cavernicola Keys. is in the Shawnee Cave."

Elliott (21) lists Mayfield's Cave and Hamer's Cave for this species. Elliott (22) credits the Mayfield's Cave record to Banta and drops the Hamer's Cave record. Banta (4) did not collect this species in Mayfield's Cave, and the writer is certain that a Hamer's Cave collection never existed.

Elliott (22) should not have included *Troglohyphantes incertus* Emer. in the list of Indiana spiders. Emerton described this spider in 1875 from specimens taken in caves in Virginia and Kentucky. The last paragraph of the description, which is also included in Packard (48), pages 275-276, says, "Fountain Cave, Virginia, among stalactites, in company with *Nesticus pallidus* (Packard); also in Bat Cave, Carter County, Kentucky (Shaler and Packard)."

FAMILY Micryphantidae

63. Anthrobia sp.

Crawford (Wyandotte Cave, 18, 22)

The writer is hesitant to include this spider as a record for Indiana. Elliott (22) included this spider as A. mammouthia Tellkampf. Cope (18) listed specimens from Wyandotte Cave as Anthrobia. He gave these specimens no specific name, believing them different from A. mammouthia, which he had listed from Mammouth Cave, Kentucky. Cope gives this account of his collections in Wyandotte Cave: "Two species of Arachnidans were observed, one a true spider, the other related to the "long-legs" of the woods. A species similar to the former is found in the Mammouth Cave [A. mammouthia], and others in other caves, but in every instance where I have obtained them, they have been lost by the dissolution of their delicate tissues in the impure alcohol."

Emerton (23) had A. mammouthia listed from Mammouth, Proctor's and Diamond Caves, all of which occur in Kentucky. Emerton made no mention of collecting A. mammouthia from Wyandotte Cave as Elliott (22) has indicated.

- 64. Catabrithorax oxypaederotipus (Crosby), 1905
 - Wayne (Richmond, 20, 21, 22); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22)
- 65. Catabrithorax plumosus (Emerton), 1882 Tippecanoe (Americus, Aug. 24, 1967, TAP)

This specimen was determined by Wilton Ivie of the American Museum of Natural History.

- 66. Catabrithorax probatus (Cambridge), 1874
 - Wayne (Richmond, 20, 21, 22); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22)
- 67. Ceraticelus emertoni (O.P.-Cambridge), 1874

Wayne (Richmond, 21, 22); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22); LaPorte (Smith, 39, 22); Tippecanoe (Ross Biological Reserve, 5)

- 68. Ceraticelus fissiceps (O.P.-Cambridge, 1874
 - Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22)
- Ceraticelus laetus (O.P.-Cambridge), 1874
 Fountain (Attica, July 4, 1968, TAP)
- 70. Ceraticelus limnologicus Crosby & Bishop, 1925

Porter (Dunes Acres, 39, 22; Ogden Dunes, 39, 22)

Lowrie (39) reported *C. limnologieus*, not *C. homologieus* as Elliott (22) has indicated.

- 71. Ceraticelus minutus (Emerton), 1882
 - Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22; Ogden Dunes, 39, 22)
- 72. Ceratinella brunnea Emerton, 1882

Wayne (Richmond, 20, 21, 22); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22)

73. Ceratinops rugosa (Emerton), 1909

Tippecanoe (Ross Biological Reserve, 5)

- 74. Ceratinopsis anglicana (Hentz), 1850
 Porter (Dunes Acres, 38, 39, 22; Ind. Dunes State Park, 22)
- 75. Ceratinopsis interpres (O.P.-Cambridge), 1874
 LaPorte (Otis, 53); Porter (Woodville, 53; Valparaiso, 21, 22);
 Wayne (Richmond, 20, 21, 22); Steuben (Crooked Lake, 21, 22);
 Brown (Nashville, 21, 22)
- 76. Cornicularia minuta Emerton, 1882 Wayne (Richmond, 20, 21, 22)
- 77. Eperigone contorta (Emerton), 1882 Porter (Dunes Acres, 38)
- 78. Eperigone indicabilis Crosby & Bishop, 1928
 Tippecanoe (Americus, July 27, 1967, TAP)

This specimen was determined by Wilton Ivie of the American Museum of Natural History.

79. Eperigone tridentata (Emerton), 1882 Owen (Porter's Cave, 6, 2, 21, 22); INDIANA (49)

Nathan Banks determined the specimen sent to him by Blatchley from Porter's Cave as *Tmeticus tridentatus* Emerton. Blatchley (6) reported this species in his paper. Banks (2) reported the same species from Porter's Cave, putting it in the genus *Gonglydium*. Elliott (22) should have recorded *Oedothorax tridentatus* Emer., not *bidentatus*, as he has for number 126. Elliott (21) recorded *O. bidentatus* synonymizing this species with *Gonglydium tridentatus* Emer. This synonymy is incorrect.

- 80. Eridantes erigonoides (Emerton), 1882 Spencer (Santa Claus, May 22, 1966, RWM)
- 81. Erigone aletris Crosby & Bishop, 1928 Fountain (Attica, Aug. 16, Sept. 6, 1968, TAP)
- 82. Erigone atra Blackwall, 1833

?E. longipalpis Emer., 1882

Marshall (Arlington, June 10, 2, 21, 22); INDIANA (49); Fountain (Attica, Aug. 11, 1967, TAP)

83. Erigone autumnalis Emerton, 1882

Porter (Dunes Acres, 38, 39, 22); Tippecanoe (Aug. 1, 1967, RWM); Harrison (May 11, 1966, RWM); Switzerland (May 11, 23, 1966, RWM); Spencer (Santa Claus, Aug. 21, 1966, RWM); Vanderburgh (May 21, June 1, July 1, 21, RWM)

- 84. Erigone blaesa Crosby & Bishop, 1928
 Fountain (Attica, July 4, 1968, TAP)
- 85. Erigone dentigera O.P.-Cambridge, 1874 ?E. longipalpis Emer., 1882

Porter (Dunes Acres, 38, 39, 22); Cass (Logansport, Aug. 3, 1967, TAP); Fountain (Attica, July 28, 1967, TAP)

86. Erigone infernalis Keyserling, 1886

Monroe (Mayfield's Cave, 4, 43, 44, 21, 22); Lawrence (Twin Cave at Mitchell, 4, 2, 21, 22); INDIANA (49)

- 87. Goneatara platyrhinus (Crosby & Bishop), 1927 Wayne (Richmond, 20, 21, 22)
- 88. Grammonota inornata Emerton, 1882

 Tippecanoe (Lafayette, 25, 22); Wayne (Richmond, 21, 22)
- 89. Hypselistes florens (O.P.-Cambridge), 1875
 Porter (Dunes Acres, 38, 39, 22); LaPorte (Smith, 39, 22)
- 90. Islandiana longisetosus (Emerton), 1882 Fountain (Attica, July 4, 1968, TAP)
- 91. Mythoplastoides exiguus (Banks), 1892 Wayne (Richmond, 20, 21, 22)
- 92. Oedothorax montiferus (Emerton), 1882 Wayne (Richmond, 20, 21, 22)
- 93. Origanates rostratus (Emerton), 1882
 Wayne (Richmond, 20, 21, 22); Steuben (Crooked Lake, 21, 22);
 Warren (South Pine Creek, Apr. 13, 1968, GRF)
- 94. Pelecopsis bishopi Kaston, 1945 Tippecanoe (Ross Biological Reserve, 5)
- 95. Phanetta subterranea (Emerton), 1875

Crawford (Wyandotte Cave, 23, 47, 48, 6, 2, 21, 22; Little Wyandotte Cave, 43, 22; Saltpetre Cave, 43, 21, 22); Owen (Spring Cave, 43, 22); Monroe (Truett's Cave, 4, 2, 21, 22; Mayfield's Cave, 4); INDIANA (49)

McIndoo (43) recorded this species from Spring Cave, not from Marengo Cave as Elliott (21) has indicated. Spring Cave is situated $\frac{1}{2}$ mile west of Marengo Cave.

Emerton (23) recorded this species "under stones in Carter and Wyandotte Caves (Packard)", not in Bradford Cave as Elliott (22) had indicated. Carter Cave is in Kentucky.

- 96. Scylaceus pallidus (Emerton), 1882 Wayne (Richmond, 20, 21, 22); Steuben (Crooked Lake, 21, 22)
- 97. Walckenaera vigilax (Blackwall), 1853
 Tippecanoe (Americus, Aug. 24, 1967, July 18, 1968, TAP)

FAMILY Araneidae

98. Acacesia hamata (Hentz), 1847

Posey (Grand Chain, July 8, 2, 21, 22); Putnam (Greencastle, 2, 21, 22); INDIANA (49); Wayne (Richmond, 20, 21, 22)

99. Acanthepeira stellata (Walckenaer), 1841 Tippecanoe (Lafayette, 25, 22; West

Tippecanoe (Lafayette, 25, 22; West Lafayette, Oct. 14, 1967, JEW); Putnam (Greencastle, 2, 21, 22); Knox (Vincennes, July 10, 2, 21, 22, Apr. 14, 1968, TAP); Posey (Grand Chain, July 8, 2, 21, 22; Mount Vernon, Aug. 17, 1966, TAP); Starke (Bass Lake, June 20, 2, 21, 22); Jennings (North Vernon, Sept. 14, 2, 21, 22); Porter (Dunes Acres, 38, 39, 22; Ind. Dunes State Park, 22); Parke (Aug. 21, 1966, RWM); Benton (Otterbein, Apr. 25, 1968, JOS)

100. Allepeira lemniscata (Walckenaer), 1841

Linyphia conferta Hentz, 1850

Hentzia basilica: McCook, 1878

Wayne (Richmond, 20, 21, 22); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22)

101. Aranea cavatica (Keyserling), 1881 Wayne (Richmond, 21, 22)

102. Aranea miniata (Walckenaer), 1841 LaPorte (Smith, 39, 22); Wayne (Dalton, Aug. 2, 1967, GLW)

103. Aranea nordmanni (Thorell), 1870 Tippecanoe (Aug. 30, 1966, ES)

104. Aranea solitaria (Emerton), 1884

A. angulata Clerck, 1757

Putnam (Greencastle, 2, 21, 22); Wayne (Richmond, 20, 21, 22, 39); LaPorte (Smith, 39, 22)

105. Araneus nigripes (Keyserling), 1883 Posey (Grand Chain, May 12, 2, 21, 22); INDIANA (49)

106. Araniella displicata (Hentz), 1847

Tippecanoe (Lafayette, 25); Kosciusko (Tippecanoe Lake, June 6, 2, 21, 22; Vawter Park, June 1, 2, 21, 22); Posey (Grand Chain, June 3, 2, 21, 22); Martin (Shoals, May 16, 2, 21, 22); Fountain (Attica, June 20, 2, 21, 22); Porter (Dunes Acres, 38, 39); LaPorte (Smith, 39); Warren (Pine Village, June 1, 1968, TH)

107. Argiope aurantia Lucas, 1833

Tippecanoe (Lafayette, 25, 22); Whitley? (Round and Shriner Lake, 55); Putnam (Greencastle, 2, 21, 22); Marshall (Lake Maxinkaukee, Aug. 7, 2, 21, 22); Wayne (Richmond, 21, 22); Brown (Nashville, 21, 22); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ind. Dunes State Park, 22); Pulaski (Winamac, Aug. 22, 1967, TAP)

E. B. Williamson (55) was probably referring to this species when he stated on page 155, "In the webs of a species of large black and yellow spider(*Argiope*) I have found the remains [of dragonflies]."

108. Argiope trifasciata (Forkstal), 1775

Tippecanoe (Lafayette, 25, 22); Putnam (Greencastle, 2, 22); Lake (Clark, 53; Miller, 53); Porter (Ind. Dunes State Park, 53, 22; Valparaiso, 21, 22; Dunes Acres, 38, 39, 22); Wayne (Richmond, 21, 22); Brown (Nashville, 21, 22); Fountain (Attica, Sept. 7, 1967, TAP)

109. Cyclosa turbinata (Walckenaer), 1841

C. caudata (Hentz), 1850

Tippecanoe (Lafayette, 25, 22); Putnam (Greencastle, 2, 22); Porter (Dunes Acres, 38, 39, 22; Ind. Dunes State Park, 22)

110. Epeira dumetorum (Villers), 1789

Tippecanoe (Ross Biological Reserve, 5); Posey (Mount Vernon,

Aug. 18, 1966, TAP); Sullivan (Merom Station, July 21, 1966; TAP); Gibson (Mount Carmel, July 27, 28, 1966, July 12, 1967, TAP); LaPorte (LaPorte, June 19, 1968, TAP); Vermillion (Clinton, July 20, 1967, TAP); Fulton (Rochester, Aug. 29, 1967, TAP)

111. Epeira foliata (Fourcroy), 1785

Tippecanoe (Lafayette, 25, 22; June 4, 1967, TAP); Kosciusko (Tippecanoe Lake, Aug. 17, 2, 21, 22; Vawter Park, June 1, 2, 21, 22); Knox (Vincennes, Nov. 26, 2, 21, 22; July 2, 2, 21, 22); Marshall (Arlington, June 10, 2, 21, 22; Culver, June 29, 2, 21, 22); Posey (Grand Chain, July 8, 2, 21, 22; Mount Vernon, June 8, 1967, TAP); Putnam (Greencastle, 2, 21, 22); Clark (Jeffersonville, June 23, 2, 21, 22); Wayne (Richmond, 21, 22); Porter (Dunes Acres, 38, 39, 22); Huntington (Huntington, June 28, 29, 1966, Aug. 15, 1967, TAP); Fulton (Rochester, June 7, 1966, TAP); Gibson (Mount Carmel, July 27, 28, 1966, Sept. 29, 1967, TAP); Sullivan (Merom Station, July 20, 21, 1966, TAP); Brown (Brown Co. State Park, Sept. 13, 1966, TAP); Franklin (Brookville, Aug. 30, 1966, TAP); Benton (Otterbein, Apr. 22, 1968, JOS); LaPorte (LaPorte, June 19, 1968, TAP); Pulaski (Winamac, Aug. 22, 1967, TAP)

112. Epeira pegnia Walckenaer, 1841

Tippecanoe (Lafayette, 25, 22); Putnam (Greencastle, 2, 21, 22)

113. Epeira raji (Scopoli), 1763

Tippecanoe (Lafayette, 25, 22); Knox (Vincennes, Aug. 23, 2, 21, 22); Lawrence (Mitchell, July 13, 2, 21, 22); Parke (Montezuma, Aug. 12, 2, 21, 22); Marion (May 30, 2, 21, 22); Putnam (Greencastle, 2, 21, 22); Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Porter (Woodville, 53; Valparaiso, 21, 22; Ogden Dunes, 39, 22); Brown (Nashville, 21, 22; Brown Co. State Park, Sept. 13, 1966, TAP); LaPorte (Otis, 53; Smith, 39, 22); Lake (Hessville, 53; Liverpool, 53)

114. Epeira thaddeus Hentz, 1847

Putnam (Greencastle, 2, 21, 22); Porter (Dunes Acres, 38, 39, 22; Ind. Dunes State Park 22); LaPorte (Smith, 39, 22)

115. Epeira trifolium Hentz, 1847

Tippecanoe (Lafayette, 25, 22); Marshall (Culver, Aug. 22, 2, 21, 22); Putnam (Greencastle, 2, 21, 22); Wayne (Richmond, 21, 22); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ind. Dunes State Park, 22); LaPorte (Smith, 39, 22)

116. Epeira undata (Olivier), 1787

Tippecanoe (Lafayette, 25, 22); Putnam (Greencastle, 2, 21, 22); Cass (Logansport, July 15, 1968, TH)

117. Eustala anastera (Walckenaer), 1841

Tippecanoe (Lafayette, 25, 22; Americus, Aug. 1, 1967, TAP); Kosciusko (Tippecanoe Lake, June 6, 2, 22); Vawter Park, June

1, 2, 22); Lake (Hammond, June 16, 2, 22; Pine, June 29, 2, 22; Miller, 39); Knox (Vincennes, July 10, Aug. 23, 2, 22; July 2, 2, 22); Marshall (Arlington, June 10, 2, 22; Culver, June 29, 2, 22); Starke (Bass Lake, June 20, 22, 2, 22); Crawford (Wyandotte, June 25, 2, 22); Posey (Grand Chain, July 8, June 3, 2, 22; Mount Vernon, Aug. 18, 1966, TAP); Fountain (Attica, June 20, 2, 22, Aug. 3, 1966, July 25, Aug. 11, 1967, TAP); Wayne (Richmond, 20, 21, 22, 39); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22); LaPorte (Smith, 39, 22); Sullivan (Merom Station, July 20, 21, 1966, July 18, 1967, TAP); Gibson (Mount Carmel, July 27, 28, 1966, TAP); Vermillion (Clinton, July 14, 1966, July 20, 1967, TAP); Fulton (Rochester, Aug. 29, 1967, TAP)

118. Eustala cepina (Walckenaer), 1841

Carroll (Delphi, Aug. 3, 1967, TAP), Sullivan (Merom Station, July 20, 1966, July 18, 1967, TAP), Gibson (Mount Carmel, July 27, 1966, TAP), Fountain (Attica, Aug. 3, 1966, July 25, 1967, TAP); Posey (Mount Vernon, Aug. 18, 1966, TAP)

These specimens were determined by Wilton Ivie of the American Museum of Natural History.

119. Mangora gibberosa (Hentz), 1847

Wayne (Richmond, 20, 21, 22, 39); Brown (Nashville, 21, 22); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22), LaPorte (Smith, 39, 22); Tippecanoe (Ross Biological Reserve, 5; Ent. Research Area, July 24, 1968, MKP)

120. Mangora ornata (Walckenaer), 1841

M. maculata (Keyserling), 1865

Lake (Hessville, 53; Liverpool, 53); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22); LaPorte (Smith, 39, 22); Tippecanoe (Ross Biological Reserve, 5); Carroll (Pyrmont, July 28, 1968, RWM)

121. Mangora placida (Hentz), 1847

Crawford (Wyandotte, *June 26*, 2, 21, 22); Posey (New Harmony, *May 6*, 2, 21, 22); Sullivan (Merom Station, *July 18*, 1967, TAP)

122. Mastophora bisaccata (Emerton), 1885

Wayne (Richmond, 20, 21, 22); **Tippecanoe** (Lafayette, *Sept.* 29, 1967, GL)

123. Mastophora cornigera (Hentz), 1850

Tippecanoe (Lafayette, 25, 22), Putnam (Greencastle, 2, 21, 22)

124. Meta menardi (Latrielle), 1804

Tippecanoe (Lafayette, 25, 22; Ross Biological Reserve, 5); Monroe (Mayfield's Cave, 6, 2, 4, 21, 22; Strong's Cave, 6, 2, 21, 22; Saltpetre Cave, 6, 2, 44; Coon Cave, Sept. 14, 1967, TAP); Lawrence (Donnehue's Cave, 6, 2, 22; Donnelson's Cave,

6, 4, 2, 21, 22; Mitchell, July 15, 2, 21, 22; Lower Twin Cave at Mitchell, 2, 4, 22; Shawnee Cave, 43, 22); Bartholomew (Clifty Cave, 6, 2, 21, 22); Crawford (Wyandotte Cave, 6, 2, 21, 22; Saltpetre Cave, 6, 2, 21, 22); Putnam (Greencastle, 2, 21, 22); Owen (Spring Cave, 44, 22); Porter (Dunes Acres, 38)

Elliott (22) states on page 312 that Emerton (23) collected *Meta menardi* from Bradford and Wyandotte Caves. This inclusion is erroneous. Emerton (23), page 278, says, "Two species were found only about the mouths of caves. These are *Theridion vulgare* Hentz, a spider found all over the country in shady places, and a large species of Meta, which has been found in similar situations in Massachusetts and New Hampshire, and resembles *Epeira fusca* Blackwall."

Emerton did not say near which caves these spiders were found, nor did he positively identify these spiders as *Meta menardi* (Latrielle), 1804.

Banta (4) did not report *Meta menardi* from Strong's Cave, as Banks (2) and Elliott (22) have indicated.

125. Metepeira labyrinthea (Hentz), 1847

Putnam (Greencastle, 2, 21, 22); LaPorte (Smith, 39, 22)

126. Micrathena gracilis (Walckenaer), 1841

Marion (Indianapolis, 30, 22); INDIANA (40); Tippecanoe (Lafayette, 25, 22; Ross Biological Reserve, 5); Crawford (Wyandotte, Sept. 9, 2, 21); Putnam (Greencastle, 2, 21); Lake (Hessville, 53; Liverpool, 53); Wayne (Richmond, 20, 21, 22); Porter (Valparaiso, 21, 22)

Lindsey, et al. (37) state that *Micrathena agilis* Walckenaer is found on islands in the Wabash River. The name *agilis* has never been used for a North American member of this genus. Apparently *M. gracilis* was collected, not *M. agilis*.

127. Micrathena mitrata (Hentz), 1850

Putnam (Greencastle, 2, 22); Brown (Brown Co. State Park, Sept. 13, 1966, TAP)

128. Micrathena sagittata (Walckenaer), 1841

Marion (Indianapolis, 30, 22); Tippecanoe (Lafayette, 25, 22); Crawford (Wyandotte, June 26, July 25, 2, 21, 22); Lawrence (Mitchell, July 15, 2, 21, 22); Putnam (Greencastle, 2, 21, 22); Knox (Vincennes, July 10, 2, 21); Lake (Hessville, 53; Liverpool, 53); Wayne (Richmond, 20, 21, 22, 39); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22); LaPorte (Smith, 39, 22)

129. Neoscona arabesca (Walckenaer), 1841

Tippecanoe (Lafayette, 25, 22, Sept. 24, 1966, ES); Kosciusko (Tippecanoe Lake, June 6, 8, 2, 21, 22); Lake (Hammond, May 29, July 30, 2, 21, 22); Knox (Vincennes, Aug. 23, 2, 21, 22); Posey (Arlington, June 10, 2, 21, 22; Mount Vernon, Aug. 30, 1966, TAP); Crawford (Wyandotte, Sept. 9, 2, 21, 22); Starke (Bass Lake, June 17, 20, 22, 2, 21, 22); Marshall (Culver, June 29, 2, 21, 22); Putnam (Greencastle, 2, 21, 22); LaPorte

(Wilders, July 25, 2, 21, 22; Smith, 39, 22); Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22); Brown (Brown Co. State Park, Sept. 13, 1966, TAP); Carroll (Delphi, Sept. 25, 1966, TAP); Benton (Otterbein, Apr. 25, 1968, JOS); Fulton (Rochester, June 6, 1966, Aug. 29, 1967, TAP); Fountain (Attica, July 25, 1967, TAP)

130. Neoscona benjamina (Walckenaer), 1841

Tippecanoe (Lafayette, 25; Sept. 26, 1966, JDH); Posey (Grand Chain, July 8, 2, 21; Mount Vernon, Aug. 18, 1967, TAP); Dubois (Huntingburg, 2, 21); Putnam (Greencastle, 2, 21); Lake (Miller, 53, Pine 53; Hessville, 53; Liverpool, 53); Porter (Woodville, 53; Ind. Dunes State Park, 53; Dunes Acres, 38, 39); LaPorte (Otis, 53: Smith, 39); Brown (Brown Co. State Park, Sept. 13, 1966, TAP); Pulaski (Winamac, Aug. 22, 1967, TAP); Benton (Otterbein, Apr. 29, 1968, JOS)

131. Neoscona pratensis (Hentz), 1847
Porter (Dunes Acres, 38, 39, 22; Ind. Dunes State Park, 22)

132. Nephila clavipes (Linnaeus), 1758 Wayne (Richmond, 21, 22)

133. Singa hentzi Banks, 1907
Perry (Cannelton, May 31, 2, 3, 21, 22); INDIANA (49)

134. Singa variabilis Emerton, 1884 Kosciusko (Tippecanoe Lake, 2, 21, 22)

135. Verrucosa arenata (Walckenaer), 1841

Tippecanoe (Lafayette, 25, 22); Knox (July 2, 2, 21, 22); Vincennes, July 10, 2, 21, 22); Parke (Montezuma, Aug. 12, 2, 21, 22); Crawford (Wyandotte, Sept. 9, 2, 21, 22); Putnam (Greencastle, 2, 21, 22); Wayne (Richmond, 20, 21, 22); Steuben (Crooked Lake, 21, 22)

136. Wixia anaglyphe (Walckenaer), 1841

W. ectypa (Walckenaer), 1841

Posey (Grand Chain, *June 3*, 2, 21, 22); Wayne (Richmond, 20, 21, 22)

Walckenaer's description of W. anaglyphe came one page before W. ectypa of the same publication.

FAMILY Theridiosomatidae

137. Theridiosoma gemmosum (L. Koch), 1877

Monroe (Mayfield's Cave, 2, 4, 21, 22); LaPorte (Smith, 39, 22)

FAMILY Tetragnathidae

138. Leucage venusta (Walckenaer), 1841

L. hortorum (Hentz), 1847

Tippecanoe (Lafayette, 25, 22; Ross Biological Reserve, 5); Posey (Arlington, June 10, 2, 21, 22; Grand Chain, May 12,

2, 21, 22); Putnam (Greencastle, 2, 21?, 22; Bainbridge, Apr. 23, 1967, TAP); Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22); LaPorte (Smith, 39, 22)

Banks (2) collected this species at Greencastle, not New Castle, as Elliott (21) has indicated.

139. Mimognatha foxi (McCook), 1894

Posey (Mount Vernon, June 8, 1967, TAP); Fountain (Attica, Aug. 11, 25, 1967, TAP); Tippecanoe (Lafayette, Oct. 23, 1966, RWM)

Wilton Ivie of The American Museum of Natural History determined the Mount Vernon collection.

140. Pachygnatha brevis Keyserling, 1883

Cass (Logansport, Apr. 6, 1967, TAP)

Pachygnatha tristriata and P. brevis are not synonymous, as Elliott (22) has indicated.

141. Pachygnatha tristriata C. L. Koch, 1845

Tippecanoe (Lafayette, 25, 22); Posey (New Harmony, June 4, 2, 21, 22); INDIANA (49); Wayne (Richmond, 21, 22); Knox (Oct. 31, 1966, RWM)

142. Pachygnatha xanthostoma C. Koch, 1845 Wayne (Richmond, 21, 22)

143. Tetragnatha banksi McCook, 1894

T. seneca Seeley, 1928

Fulton (Rochester, June 7, 1966, Aug. 29, 1967, TAP); Sullivan (Merom Station, July 20, 21, 1966, TAP); Posey (Mount Vernon, Aug. 18, 1966, TAP); Pulaski (Winamac, Aug. 22, 1967, TAP); Sullivan (Clinton, July 20, 1967, TAP); Gibson (Mount Carmel, July 27, 1966, July 12, 1967, TAP)

After a thorough examination of paratype material of *Tetragnatha guatemalensis* O. P. Cambridge, 1889, the writer is convinced that *T. banksi* and *T. guatemalensis* are not synonymous, as Chickering (13, 14), has concluded. The writer reviewed McCook (41), Levi and Field (36), O. P. Cambridge (8), F. P. Cambridge (7), Seeley (52), and Chickering (13, 14, 15) in reaching the above conclusions. The writer feels certain that *T. seneca* Seeley is a synonym of *T. banksi* McCook, 1894.

Both *T. banksi* and *T. guatemalensis* occur in the United States. *Tetragnatha guatemalensis* reaches a few southern states (as e.g., Chamberlin and Ivie, [10] and possibly McCook's specimens from Florida). *Tetragnatha banksi* is more northern in distribution (as e.g., Seeley's collections, Levi and Field's collections, the writer's collections and McCook's specimen from Wisconsin).

The "large tooth" on the male chelicera of T. guatemalensis is always missing in males of T. banksi. Chickering (13) says the "large tooth" of T. guatemalensis males is not well developed and that of T.

banksi is a reduced condition. The writer has found and D. J. Clark of the British Museum reaffirms that the "large tooth" is quite strong in the male of T. guatemalensis.

Since Tetragnatha guatemalensis is found in the United States, a series of "large tooth" reductions should be found in males as one travels from south to north if one wishes to synonymize this species with T. banksi. The writer can find no evidence of such a cline.

144. Tetragnatha elongata Walckenaer, 1841

T. grallator Hentz, 1847

Tippecanoe (Lafayette, 25, 22; Ross Biological Reserve, 5; Americus, June 23, 1966, Aug. 1, 1967, TAP); Kosciusko (2, 21, 22; Tippecanoe Lake, June 6, 8, 2, 21, 22; Winona Lake, 33, 22); Posey (Arlington, June 10, 2, 21, 22; Mount Vernon, Aug. 18, 1966, June 8, 1967, TAP); Dubois (Huntingburg 2, 21, 22); Wayne (Richmond, 21, 22); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22); Brown (Brown Co. State Park, Sept. 13, 1966, TAP); Fulton (Rochester, June 6, 7, 1966, Aug. 29, 1967, TAP); Cass (Logansport, July 6, 7, 1966, Aug. 3, 1967, TAP); Carroll (Delphi, June 23, 1966, TAP); Vermillion (Clinton, July 13, 14, 1966, July 20, 1967, TAP); Gibson (Mt. Carmel, July 27, 28, 1966, July 12, 1967, TAP); Pulaski (Winamac, June 15, 16, 1966, Aug. 22, 1967, TAP); Sullivan (Merom Station, July 20, 21, 1966, July 18, 1967, TAP); Huntington (Huntington June 28, 29, 1966, Aug. 15, 1967, TAP); Fountain (Attica, Aug. 3, 1966, July 25, Aug. 25, 1967, TAP)

145. Tetragnatha extensa (Linnaeus), 1758

T. rusticana Chickering, 1959

Kosciusko (Tippecanoe Lake, June 6, 8, 2, 21, 22; Winona Lake, 33); Knox (July 2, 2, 21, 22; Vincennes, July 10, 2, 21, 22); Posey (Grand Chain, July 8, 2, 21, 22); Marshall (Culver, June 29, 2, 21, 22)

Dr. A. M. Chickering has informed this writer that his T. rusticana is generally considered a synonym of T. extensa, a good description of which may be found in Chickering (14).

146. Tetragnatha laboriosa Hentz, 1850

Tippecanoe (Lafayette, 25, 22; Ross Biological Reserve, 5; Americus, June 23, 1966, TAP); Kosciusko (Tippecanoe Lake, June 6, 2, 21, 22; Vawter Park, June 1, 2, 21, 22; Winona Lake, 33, 22); Lake (Hammond, May 29, June 16, July 30, 2, 21, 22; Pine, May 25, 2, 21, 22); Posey (Arlington, June 10, 2, 21, 22; Grand Chain, June 3, 2, 21, 22; Mount Vernon, June 8, 1967, TAP); Crawford (Wyandotte, June 25, 2, 21, 22); Lawrence (Mitchell, Apr. 2, 2, 21, 22; Twin Caves, 4, 22; Donnelson's Cave, 4, 22); Putnam (Greencastle, 2, 21, 22); Fountain (Attica, June 20, 2, 21, 22, Aug. 3, 1966, July 25, Aug. 11, 25, Sept. 7, 1967, TAP); LaPorte (Wilders, July 25, 2, 21, 22; Smith, 39, 22); Brown (Nashville, 21, 22); Steuben (Crooked Lake, 21, 22); Wayne (Richmond, 20, 21, 22, 39); Porter (Dunes Acres,

38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park 22); Sullivan (Merom Station, July 20, 21, 1966, July 18, 1967, TAP); Pulaski (Winamac, Aug. 22, 1967, TAP); Carroll (Delphi, Aug. 3, 1967, TAP); Vermillion (Clinton, July 13, 14, 1966, July 20, 1967, TAP); Cass (Logansport, July 6, 1966, TAP); Gibson (Mount Carmel, July 27, 28, 1966, TAP); Fulton (Rochester, June 6, 7, 1966, TAP); Huntington (Huntington, Aug. 15, 1967, TAP)

Banks (2) did not report a separate collection from Lake County as Elliott (22) has indicated.

147. Tetragnatha pallescens F.O.P.-Cambridge, 1903

Kosciusko (Winona Lake, 33, 22); Porter (Dunes Acres, 38, 39, 22); Posey (Mount Vernon, Aug. 18, 1966, June 8, 1967, TAP); Sullivan (Merom Station, July 20, 21, 1966, TAP); Fountain (Attica, Aug. 3, 1966, July 25, 1967, TAP); Gibson (Mount Carmel, July 28, 1966, TAP); Cass (Logansport, Aug. 3, 1967, TAP); Vermillion (Clinton, July 20, 1967, TAP)

148. Tetragnatha straminea Emerton, 1884

Kosciusko (Tippecanoe Lake, June 6, 2, 21, 22; Winona Lake, 33, 22); INDIANA (49); Porter (Dunes Acres, 38, 39, 22; Ind. Dunes State Park, 22); LaPorte (Smith, 39, 22); Tippecanoe (Ross Biological Reserve, 5)

149. Tetragnatha vermiformis Emerton, 1884

Kosciusko (Winona Lake, 33, 22); Tippecanoe (Ross Biological Reserve, 5)

150. Tetragnatha veriscolor Walckenaer, 1841

Tippecanoe (Ross Biological Reserve, 5; Americus, June 23, 1966, TAP); Sullivan (Merom Station, July 20, 21, 1966, TAP); Huntington (Huntington, June 28, 29, 1966, Aug. 15, 1967, TAP); Cass (Logansport, July 6, 1966, July 25, Aug. 3, 1967, TAP); Fulton (Rochester, June 6, 7, 1966, TAP); Fountain (Attica, Aug. 3, 1966, TAP); Pulaski (Winamac, June 16, 1966, TAP); Vermillion (Clinton, July 20, 1967, TAP); Posey (Mount Vernon, June 7, 8, 1967, TAP)

FAMILY Ctenidae

151. Anahita animosa (Walckenaer), 1837

Crawford (Wyandotte, *Apr. 17*, *Sept. 8*, 2, 21, 22), INDIANA (49)

FAMILY Mimetidae

152. Ero furcata (Villers), 1789

Tippecanoe (Lafayette, 25, 22); Wayne (Richmond, 20, 21, 22, 39); Porter (Ogden Dunes, 39, 22)

153. Mimetus dissimulatus (Walckenaer), 1841

M. interfector Hentz, 1850

Martin (Shoals, May 16, 2, 21, 22); Porter (Dunes Acres, 38, 39; Ogden Dunes, 39; Ind. Dunes State Park, 22); LaPorte (Smith, 39)

154. Mimetus puritanus Chamberlin, 1923

Sullivan (Merom Station, July 20, 1966, TAP)

Wilton Ivie of The American Museum of Natural History determined the writer's specimen.

FAMILY Agelenidae

155. Agelenopsis naevia (Walckenaer), 1841

Marion (Indianapolis, 29, May 30, 2, 21, 22); Tippecanoe (Lafayette, 25, 22); Kosciusko (Tippecanoe Lake, Aug. 17, 2, 21, 22); Knox (Vincennes, Aug. 31, 2, 21, 22); Jennings (North Vernon, Sept. 14, 2, 21, 22); Floyd (New Albany, Sept. 11, 2, 21, 22); Steuben (Clear Lake, Aug. 13, 2, 21, 22; Crooked Lake, 21, 22); Putnam (Greencastle, 2, 21, 22); Dubois (Huntingburg, 2, 21, 22, Aug. 17, 18, 1967, ES); Wayne (Richmond, 20, 21, 22); Brown (Nashville, 21, 22; Brown Co. State Park, Sept. 13, 1966 TAP); Porter (Valparaiso, 21, 22); Fulton (Rochester, Sept. 16, 1967, TAP)

Agelenopsis pennsylvanica is not a synonym of A. naevia as Elliott (22) has indicated.

156. Agelenopsis pennsylvanica (C. L. Koch), 1843

Porter (Dunes Acres, 38, 39); LaPorte (Smith, 39); Tippecanoe (Lafayette, Sept. 15, 1966, TAP; West Lafayette, Oct. 22, 1966, TAP)

Lowrie (39) reported that Elliott (20) had collected A. pennsylvanica from Richmond. Elliott (20, 21) collected A. naevia, not A. pennsylvanica from Richmond.

157. Ayelenopsis utahana (Chamberlin & Ivie), 1933 Porter (Ogden Dunes, 39, 22); LaPorte (Smith, 39, 22)

158. Auchicybaeus ovalis Gertsch, 1933

Crawford (Marengo Cave, 26)

Gertsch (26), page 12, states, "TYPE LOCALITY—Female holotype from Marengo Spring Cave, Crawford County, Indiana, October 20, 1911, taken in the 'area of total darkness' by Arthur W. Henn."

159. Circurina arcuata Keyserling, 1887

Tippecanoe (Lafayette, 25, 22; Merritt's Pine Plantation, July 26, 1968, RWM); Starke (Bass Lake, Apr. 9, 2, 21, 22); Wayne (Richmond, 20, 21, 22); Porter (Valparaiso, 21; Ind. Dunes State Park, 21, 22); Warren (S. Pine Creek, Apr. 13, May 5, 1968, GRF); Adams (Apr. 16, 1968, TAP)

A very closely related species, *C. robusta* Simon, 1886, occurs in the Rocky Mountains. *Cicurina arcuata* has chevrons on its abdomen, whereas *C. robusta* has an immaculate abdomen.

160. Cicurina brevis (Emerton), 1890

Starke (Bass Lake, *Apr. 9*, 2, 21, 22); INDIANA (49); Wayne (Richmond, 20, 21, 22, 39); Porter (Dunes Acres, 39, 22; Ind. Dunes State Park, 22); LaPorte (Smith, 39, 22)

161. Circurina pallida Keyserling, 1887

Starke (Bass Lake, Apr. 19, 2, 21, 22); Putnam (Apr. 22, 2, 21, 22; Bainbridge, Apr. 23, 1967, TAP); Crawford (Wyandotte, Aug. 17, 2, 21, 22?); Monroe (Mayfield's Cave, 4, 22; Truett's Cave, 4, 22); INDIANA (49); Wayne (Richmond, 20, 21, 22, 39); LaPorte (Smith, 39, 22)

Banks (2) collected this species at Wyandotte, not in Wyandotte Cave, as Elliott (22) has indicated.

162. Coras juvenilis (Keyserling), 1881

LaPorte (Smith, 39, 22); Putnam (Bainbridge, Apr. 23, 1967, TAP)

163. Coras lamellosus (Keyserling), 1887

Porter (Ogden Dunes, 39, 22); LaPorte (Smith, 39, 22); Putnam (Bainbridge, Apr. 23, 1967, TAP); Tippecanoe (Merritt's Pine Planation, Apr. 10, 1968, RWM)

164. Coras medicinalis (Hentz), 1821

Tippecanoe (Lafayette, 25, 22); Putnam (Apr. 22, 2, 21, 22); Wayne (Richmond, 20, 21, 22)

165. Coras montanus (Emerton), 1890

Coelotes montanus Emerton, 1890

Wayne (Richmond, 20, 21, 22)

166. Tegenaria cavicola Banks, 1897

Crawford (Saltpetre Cave, 1, 2, 3, 6, 21, 22); INDIANA (49)

McIndoo (43, 44) reported Willibaldia (= Troglohyphantes) cavernicola Keyserling from Shawnee Cave, not Tegenaria cavicola Banks, as Elliot (22) has indicated.

Banks (2, 3) lists the date of his description of *Tegenaria cavicola* as 1896. The date should be 1897, for the 21st Annual Report of the Indiana Dept. of Geology and Natural Resources for 1896 was not published until 1897. The title page states, "Indianapolis: 1897."

167. Tegenaria derhami (Scopoli), 1763

Tippecanoe (Lafayette, 25, 22); Crawford (Wyandotte, Sept. 9, 2, 21, 22); Monroe (Mayfield's Cave, 4, 22; Twin Cave?, 2, 21, 22), Putnam (Greencastle, 2, 21, 22); Wayne (Richmond, 21, 22); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22)

Banks (2) collected this species at Wyandotte, not in Wyandotte Cave, as Elliott (22) has indicated.

Banks (2) and Elliott (21, 22) report that Banta (4) collected this species from Twin Cave. Banta says nothing about a Twin Cave collection. Banks probably means Banta's Lower Twin Cave at Mitchell, which is in Lawrence County. Apparently Banta had done some collecting around Mitchell, Indiana, and did not mention many of these collections when he reported on Mayfield's Cave in Monroe County.

168. Wadotes calcaratus (Keyserling), 1887

Tippecanoe (Lafayette, 25, 22); Posey (New Harmony, Sept. 3, 2, 21, 22), INDIANA (49); Wayne (Richmond, 20, 21, 22); La-

Porte (Smith, 39, 22); Putnam (Bainbridge, Apr. 23, 1967, TAP); Warren (S. Pine Creek, May 5, 1968, GRF)

169. Wadotes hydridus (Emerton), 1890 Wayne (Richmond, 20, 21, 22); Putnam (Bainbridge, Apr. 23, 1967, TAP)

FAMILY Hahniidae

170. Hahnia cinerea Emerton, 1890

Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Porter (Ogden Dunes, 39, 22); Spencer (Santa Claus, May 8, 15, 22, July 17, 1966, RWM)

171. Neoantistea agilis (Keyserling), 1887

Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Tippecanoe (Ross Biological Reserve, 5; Americus, Aug. 24, Sept. 7, 1967, TAP)

172. Neoantistea radula (Emerton), 1890

Hahnia riparia Keyserling, 1887

Hahnia radula Emerton, 1890

N. riparia race radula Gertsch, 1934

Wayne (Richmond, 20, 21, 22, 39); LaPorte (Smith, 39, 22)

FAMILY Pisauridae

173. Dolomedes scriptus Hentz, 1845

Monroe (Mayfield's Cave, 4, 22); Porter (Dunes Acres, 38, 39, 22); Tippecanoe (Americus, June 23, 1966, TAP); Vermillion (Clinton, July 14, 1966, TAP); Fountain (Attica, Aug. 3, 1966, TAP); Fulton (Rochester, Aug. 29, 1967, TAP); Sullivan (Merom Station, July 18, 1967, TAP)

174. Dolomedes sexpunctatus Hentz, 1845

Tippecanoe (Lafayette, 25, 22); Kosciusko (Tippecanoe Lake, June 6, 2, 21, 22); Putnam (Greencastle, 2, 21, 22); INDIANA (49); Porter (Dunes Acres, 38, 39, 22); Fulton (Rochester, Sept. 16, 1967, TAP); Posey (Mount Vernon, June 21, 1968, TAP)

175. Dolomedes striatus Giebel, 1869 Porter (Dunes Acres, 38, 39)

176. Dolomedes tenebrosus Hentz, 1844

Tippecanoe (Lafayette, 25, 22; Americus, July 27, 1967, TAP); Crawford (Wyandotte, July 25, 2, 21, 22); Starke (Bass Lake, Oct. 10, 2, 21, 22); Lawrence (Mitchell, July 15, 2, 21, 22); Jackson (Medora, Sept. 24, 2, 21, 22); Knox (May 26, 2, 21, 22; Cypress Swamp, Sept. 25, 2, 21, 22); Marshall (Lake Maxinkuckee, Aug. 7, 2, 21, 22); Gibson (Sept. 1, 2, 21, 22); Putnam (Greencastle, 2, 21, 22); LaPorte (Wilders, July 25, 2, 21, 22; Smith, 39, 22); INDIANA (49); Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Brown (Nashville, 21, 22); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ind. Dunes State Park, 22), Carroll (Delphi, June 22, 1966,

DEW); Harrison (Mauckport, May 6, 1968, TAP); Monroe (Bloomington, July 3, 1968, TAP)

Banks (2) collected this species from Wyandotte, not in Wyandotte Cave, as Elliott (22) has indicated. Banta (4) collected *Dolomedes scriptus* from Mayfield's Cave, not *D. tenebrosus*, as Elliott (22) has indicated. *Dolomedes striatus*, *D. scriptus*, and *D. tenebrosus* are not synonymous to one another, as Elliott (22) has indicated.

177. Dolomedes urinator Hentz, 1845

Lawrence (Donnelson's Cave, 6, 2, 21, 22; Mitchell, *Apr. 2*, 2, 21, 22); INDIANA (49)

178. Pisaurina brevipes (Emerton), 1911 LaPorte (Smith, 39, 22)

179. Pisaurina mira (Walckenaer), 1837

Marshall (Arlington, June 10, 2, 21, 22; Culver, June 29, 2, 21, 22); Starke (Bass Lake, June 20, 2, 21, 22); Martin (Shoals, July 13, 2, 21, 22); Putnam (Greencastle, 2, 21, 22); Dubois (Huntingburg, 2, 21, 22); Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Brown (Nashville, 21, 22); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22); LaPorte (Smith, 39, 22); Tippecanoe (Ross Biological Reserve, 5)

180. Pisaurina mira var. subinflata (Hentz), 1850

Posey (New Harmony, Sept. 3, 2, 21, 22); Jennings (North Vernon, Apr. 14, 2, 21, 22); INDIANA (49)

FAMILY Lycosidae

181. Arctosa emertoni Gertsch, 1934

Tippecanoe (West Lafayette, Sept. 30, 1966, TAP); Fountain (Attica, July 28, 1967, TAP)

182. Arctosa funerea (Hentz), 1844

Knox (July 2, 2, 21, 22); INDIANA (49); Wayne (Richmond, 20, 21, 22); Tippecanoe (Ross Biological Reserve, 5)

183. Arctosa littoralis (Hentz), 1844

INDIANA (40), Lake (Hammond, June 16, 2, 21, 22; Pine, May 25, 2, 53, 21, 22; Miller, 53, 39, 22); Posey (Grand Chain, Sept. 5, 2, 21, 22; Mount Vernon, Aug. 17, 1966, June 7, 1967, June 8, 1968, TAP); Putnam (Greencastle, 2, 21, 22); Porter (Ind. Dunes State Park, 53; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22)

184. Arctosa noctuabunda (Montgomery), 1904 Gibson (Mount Carmel, July 12, 1967, TAP)

This specimen was determined by Dr. Willis J. Gertsch of The American Museum of Natural History. It has been retained at the Museum.

185. Arctosa rubicunda (Keyserling), 1876

Tippecanoe (Lafayette, 25, 22); INDIANA (49)

186. Geolycosa fatifera (Hentz), 1842

Crawford (Wyandotte, May 27, Sept. 8, 2, 21, 22); Posey (New Harmony, Sept. 3, 2, 21, 22); Marshall (Culver, Aug. 22, 2, 21, 22); Starke (Bass Lake, Oct. 10, 2, 21); Marion (May 30, 2, 21, 22); INDIANA (49)

187. Geolycosa missouriensis (Banks), 1895

Lake (Buffington, 54); Pulaski (Oct. 6, 1930, JJD, 54); Porter (Dunes Acres, 38, 39, 22)

Wallace (54) states, "Geolycosa fatifera (Hentz) is obviously closely related to missouriensis (Banks). Superficially they resemble each other closely, but their genitalia are distinct. It may be that, when males have been taken from a wider area, this species will be found to intergrade with missouriensis."

188. Geolycosa pikei (Marx), 1881

Lake? (Miller, 53; Pine, 53; Clark, 53); Porter? (Ind. Dunes State Park, 53)

Comstock (16, 17) states, "The range of this species includes the Eastern and Middle States and extends to the District of Columbia and to Indiana." Comstock apparently included the "Middle States" and "Indiana" on the basis of Shelford's records. The writer feels certain that Shelford's records were misidentifications. Shelford's G. pikei was most likely G. wrightii which is indigenous to the dunes area and was described by Emerton in 1912, the same year Shelford published his study.

Wallace (54) says that *Geolycosa pikei* is "the sandy-beach-inhabiting form of the New England seaboard."

189. Geolycosa wrightii Emerton, 1912

Lake (Buffington, 24?, 54; Miller, 54); Porter (Tremont, 54; Ind. Dunes State Park, 54, 22; Ogden Dunes, 54, 39, 22; Dunes Acres, 54, 38, 39, 22)

Although Emerton (24) designated no types, Wallace (54) states that the probable female type was collected at Chicago, Illinois, by C. B. Davenport in April, 1904. The probable male type was collected at Buffington, Indiana, on Sept. 6, 1909 by W. H. Wright.

190. Lycosa aspersa Hentz, 1844

Tippecanoe Lafayette, 25, 22); INDIANA (49); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22; LaPorte (Smith, 39; Michigan City, Sept. 10, 1967, TAP); Carroll (Delphi, June 23, 1966, TAP)

Lowrie (39) collected this species at Smith, not Miller, as Elliott (22) has indicated.

191. Lycosa avara (Keyserling), 1876

Tippecanoe (Lafayette, 25, 22, Oct. 10, 1966, TAP); Jennings (North Vernon, May 7, 2, 21, 22); INDIANA (49); Porter (Dunes Acres, 38, 39, 22); Spencer (Santa Claus, May 22, 1966, RWM)

192. Lycosa avida Walckenaer, 1837

Tippecanoe (Lafayette, 25, 22, Oct. 10, 1966, TAP); Lake (Hammond, May 7, 2, 21, 22); Wayne (Richmond, 21, 22); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22; Lake (Miller, 39, 22); Fountain (Attica, July 28, Aug. 11, 1967, TAP); Monroe (Bloomington, July 3, 1968, TAP)

193. Lycosa baltimoriana (Keyserling), 1876 Porter (Dunes Acres, 38, 39, 22)

194. Lycosa carolinensis Walckenaer, 1837

Tippecanoe (Lafayette, 25, 22, Sept. 22, 1966, TAP); Crawford (Wyandotte, July 25, 2, 21, 22?); Jennings (North Vernon, Sept. 14, 2, 21, 22); LaPorte (Aug. 26, 2, 21, 22); Boone (Sept. 20, 1966, TRH); Benton (Otterbein, Apr. 22, 1968, JOS)

Banks (2) collected this species at Wyandotte, not in Wyandotte Cave as Elliott (22) has indicated.

195. Lycosa frondicola Emerton, 1885

Tippecanoe (Lafayette, 25, 22); Lawrence (Mitchell, Aug. 28, 2, 21, 22); Jennings (North Vernon, Apr. 14, 2, 21, 22); Dubois (Huntingburg, 2, 21, 22); Floyd (New Albany, May 4, 2, 21, 22); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22); Lake (Miller, 39, 22); Warren (S. Pine Creek, May 5, 1968, GRF); Benton (Otterbein, May 2, 1968, JOS)

196. Lycosa gulosa Walckenaer, 1837

Kosciusko (Tippecanoe Lake, $Aug.\ 17, 2, 21, 22$); Dubois (Huntingburg, 2, 22); Starke (Bass Lake, $Oct.\ 10,\ 2,\ 21,\ 22$); Jackson (Medora, $Sept.\ 24,\ 2,\ 21,\ 22$); Posey (Grand Chain, $Sept.\ 5,\ 2,\ 21,\ 22$); Crawford (Wyandotte, $Sept.\ 8,\ 9,\ 2,\ 21$); INDIANA (49); Wayne (Richmond, 20, 21, 22, 39); LaPorte (Smith, 39, 22); Tippecanoe (Merritt's Pine Plantation, $Apr.\ 7,\ 1968,\ RWM$; Lafayette, $Apr.\ 15,\ 1968,\ TAP$)

Although the records of Banks (2) are *Lycosa kochii* Keyserling, 1876, he probably had *L. kochii* Emerton which is synonymous to *Lycosa gulosa* Walckenaer. All other records are of *L. gulosa*.

197. Lycosa helluo Walckenaer, 1837

INDIANA (40); Tippecanoe (Lafayette, 25, 22; West Lafayette, Oct. 18, 1966, TAP; Americus, July 27, Aug. 15, Sept. 7, 1967, TAP); Marshall (Arlington, June 10, 2, 21, 22); Kosciusko (Tippecanoe Lake, June 6, 2, 21, 22); Starke (Bass Lake, Apr. 9, 2, 21, 22); Lawrence (Mitchell, Aug. 28, 2, 21, 22); Posey (Grand Chain, May 12, June 3, 2, 21, 22); Jackson (Medora, Sept. 24, 2, 21, 22); Parke (Mecca, Apr. 27, 2, 21, 22); Clark (Jeffersonville, June 23, 2, 21, 22); Marion (May 30, 2, 21, 22); Dubois (Huntingburg, 2, 21, 22); Porter (Dunes Acres, 38, 39; Ogden Dunes, 39; Ind. Dunes State Park, 22); Allen (Fort

Wayne, Sept. 21, 1966, TAP); Fulton (Rochester, July 27, 1967, TAP); Fountain (Attica, July 28, 1967, July 18, 1968, TAP)

Marx (40) first recorded this species from Indiana, not Emerton, as Elliott (22) has indicated.

198. Lycosa permunda Chamberlin, 1904 LaPorte (Smith, 39, 22)

199. Lycosa punctulata Hentz, 1844

Tippecanoe (Lafayette, 25, Sept. 26, 1966, JDH); Jennings (North Vernon, Sept. 14, 2, 21, 22); Putnam (Greencastle, 2, 21, 22)

200. Lycosa rabida Walckenaer, 1837

Lawrence (Mitchell, Aug. 28, 2, 21, 22); Putnam (Greencastle, 2, 21, 22); Dubois (Huntingburg, 2, 21, 22); Wayne (Richmond, 20, 21, 22, 39); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22); LaPorte (Smith, 39, 22); Spencer (Santa Claus, July 14, 1966, RWM); Tippecanoe (Americus, July 27, 1967, TAP)

201. Pardosa lapidicina Emerton, 1885

Kosciusko (2, 21); Tippecanoe (Ross Biological Reserve, 5)

This species was not recorded by Banks (2) from Bass Lake, Jeffersonville, and Huntingburg as Elliott (22) has indicated.

202. Pardosa milvina (Hentz), 1844

Tippecanoe (Lafayette, 25, 22); Starke (Bass Lake, Apr. 10, 2, 22); Clark (Jeffersonville, June 23, 2, 21); Dubois (Huntingburg, 2, 22); Wayne (Richmond, 21, 22); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22); Lake (Miller, 39, 22); LaPorte (Smith, 39, 22); Carroll (Delphi, June 23, 1966, TAP); Huntington (Huntington, June 28, 1966, TAP); Vermillion (Clinton, July 13, 1966, July 20, 1967, TAP); Sullivan (Merom Station, July 20, 21, 1966, July 18, 1967, TAP); Gibson (Mount Carmel, July 27, 1966, July 12, 1967, TAP); Fountain (Attica, Aug. 3, 1966, July 28, Aug. 11, 25, Sept. 7, 1967, TAP); Fulton (Rochester, July 27, Sept. 16, 1967, TAP); Brown (Brown Co. State Park, Sept. 13, 1966, TAP)

Pardosa flavipes is a synonym of Pardosa milvina (Hentz), not of Pardosa flavipalpis F. Cambridge, as Elliott (21, 22) has indicated.

203. Pardosa modica (Blackwall), 1846

P. fuscula (Thorell), 1875

Porter (Dunes Acres, 38, 39, 22)

204. Pardosa moesta Banks, 1892

Porter (Dunes Acres, 38, 39, 22)

205. Pardosa xerampelina (Keyserling), 1876 Tippecanoe (Ross Biological Reserve, 5)

206. Pirata insularis Emerton, 1885

Lake (Hammond, May 7, 2, 21, 22); INDIANA (49); Porter

(Valparaiso, 21, 22; Ogden Dunes, 39, 22); LaPorte (Smith, 39, 22)

207. Pirata maculatus Emerton, 1909

Carroll (Delphi, July 7, 1966, TAP); Fountain (Attica, July 25, 1967, TAP); Tippecanoe (Americus, July 27, Aug. 10, 1967, TAP); Fulton (Rochester, July 27, 1967, TAP)

208. Pirata marxi Stone, 1890

Wayne (Richmond, 21, 22); LaPorte (Smith, 39, 22); Porter (Ind. Dunes State Park, 22); Tippecanoe (Ross Biological Reserve, 5)

209. Pirata minutus Emerton, 1885

Tippecanoe (Lafayette, 25, 22; Americus, July 27, 1967, TAP); Wayne (Richmond, 21, 22)

210. Pirata montana Emerton, 1885 Tippecanoe (Lafavette, 25)

211. Pirata piratica (Olivier), 1789

Steuben (Clear Lake, Aug. 13, 2, 21, 22); Knox (May 26, 2, 21, 22); INDIANA (49); Wayne (Richmond, 20, 21, 22, 39); Porter (Dunes Acres, 38, 39; Ogden Dunes, 39); LaPorte (Smith, 39); Tippecanoe (Americus, June 23, 1966, July 27, 1967, TAP)

212. Schizocosa bilineata (Emerton), 1885

Wayne (Richmond, 21, 22); Porter (Valparaiso, 21, 22); Tippecanoe (Merritt's Pine Plantation, June 10, 1968, RWM)

213. Schizocosa crassipalpis (Emerton), 1909

Warren (S. Pine Creek, May 5, 1968, GRF)

214. Schizocosa crassipes (Walckenaer), 1837

Tippecanoe (Lafayette, 25, 22; Americus, July 27, Aug. 24, 1967, TAP); Kosciusko (Tippecanoe Lake, June 8, Aug. 17, 2, 21, 22; Vawter Park, June 1, 2, 21, 22); Lawrence (Michell, July 15, 2, 21, 22); LaPorte (Aug. 26, 2, 21, 22; Smith, 39, 22); Wayne (Richmond, 20, 39); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22); Fulton (Rochester, July 27, Aug. 2, Sept. 16, 1967, TAP); Huntington (Huntington, Sept. 16, 1967, TAP)

215. Schizocosa saltatrix (Hentz), 1844

Tippecanoe (Lafayette, 25, 22; Ross Biological Reserve, 5); Crawford (Wyandotte, Apr. 17, 2, 21, 22?); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39; Ind. Dunes State Park, 22); Carroll (Delphi, June 23, 1966, TAP); Posey (Mount Vernon, June 7, 1967, TAP); Benton (Otterbein, May 2, 1968, JOS); Spencer (Santa Claus, May 8, 1966, RWM)

Banks (2) recorded this species from Wyandotte, not Wyandotte Cave as Elliott (22) has indicated. Lowrie (39) recorded this species from Ogden Dunes, not Smith as Elliott (22) has indicated.

216. Trochosa pratensis (Emerton), 1885

Knox (Vincennes, Apr. 25, 2, 21, 22); Crawford (Wyandotte,

Aug. 17, 2, 21, 22?); Starke (Bass Lake, Apr. 10, 2, 21, 22); Jackson (Medora, Sept. 24, 2, 21, 22); Lake (Pine, Oct. 29, 2, 21, 22); INDIANA (49)

Banks (2) recorded this species from Wyandotte, not Wyandotte Cave as Elliott (22) has indicated.

FAMILY Oxyopidae

217. Oxyopes salticus Hentz, 1845

Wayne (Richmond, 21, 22); Porter (Dunes Acres, 38, 39, 22); Tippecanoe (Ross Biological Reserve, 5; Ent. Research Area, July 24, 1968, MKP); Carroll (July 7, 1966, TAP); Fountain (Attica, Aug. 25, 1967, TAP)

FAMILY Gnaphosidae

218. Callilepis imbecilla (Keyserling), 1887

Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22); Tippecanoe (Ross Biological Reserve, 5); Spencer (Santa Claus, *June* 5, 1966, RWM)

The writer has a Callilepis in his collection, but it is not imbecilla.

- 219. Cesonia bilineata (Hentz), 1847 INDIANA (9)
- 220. Drassodes neglectus (Keyserling), 1887
 Porter (Dunes Acres, 38, 39, 22; Ind. Dunes State Park, 22)
- Drassyllus creolus Chamberlin & Gertsch, 1940
 Spencer (Santa Claus, July 3, 11, 1966, RWM)
- 222. Drassyllus depressus (Emerton), 1890
 Tippecanoe (Lafayette, 25, 22; Merritt's Pine Plantation, July 11, 1967, June 15, 1968, RWM)
- 223. Drassyllus rufulus (Banks), 1892 LaPorte (Smith, 39, 22)
- 224. Drassyllus virginianus Chamberlin, 1922 Tippecanoe (4-H Leadership Camp, July 12, 1968, TAP)
- 225. Gnaphosa sericata L. Koch, 1866
 - G. bicolor (Hentz), 1847 (bicolor preoc. by Hahn, 1831)
 INDIANA (9); Porter (Ogden Dunes, 39, 22; Ind. Dunes State
 Park, 22); Tippecanoe (Merritt's Pine Plantation, July 11,
 1967, RWM; Warren (S. Pine Creek, May 5, 1968, GRF)
- 226. Haplodrassus bicornis (Emerton), 1909 LaPorte (Smith, 39, 22)
- 227. Haplodrassus signifer (C. L. Koch), 1839
 Drassus robustus Emerton, 1890
 Tippecanoe (Lafayette, 25, 22); Porter (Dunes Acres, 38, 39, 22); Lake (Miller, 39, 22; Smith, 39, 22)
- 228. Herpyllus ecclesiasticus Hentz, 1832 H. vasifer (Walckenaer), 1837 Tippecanoe (Lafayette, 21, 22, June 20, 1968, TAP); Putnam

(Greencastle, 2, 21, 22; Bainbridge, Apr. 23, 1967, TAP); Wayne (Richmond, 20, 21, 22, 39); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22); Lake (Munster, May 2, 1968, TAP); Vanderburgh (Evansville, May 10, 1968, TAP); Fulton (Rochester, Aug. 29, 1967, TAP); Gibson (Mount Carmel, July 27, 1966, TAP)

The writer can see no reason why many have chosen to use Walckenaer's Drassus vasifer, rather than Hentz's Herpyllus ecclesiasticus. Hentz (28) gives an accurate description of the species, gives it a valid name, and tells of its habits. He states, on page 102, "...; and a blackish one with a white band on the cephalothorax, a band on the abdomen, beginning at base and reaching the middle, and a spot near the apex white. This one attains a great size and is found in houses, under stones, planks, the bark of decaying trees, etc. I call it H. ecclesiasticus, ..."

Elliott (22) lists *Nodocion* sp. for number 206. The specimen was taken at Richmond, Wayne Co., Indiana. Levi (34) described *Nodocion melanie* from Wisconsin. Elliott's specimen may be this species, but the writer has not had the opportunity to examine the specimen. Three other species of *Nodocion* are found in the West.

229. Sergiolus capulatus (Walckenaer), 1837

S. variegatus (Hentz), 1847

Kosciusko (Tippecanoe Lake, June 6, 2, 21, 22); INDIANA 49, 9); Wayne (Richmond, 20, 21, 22, 39); Porter (Valparaiso, 21, 22); Tippecanoe (Ross Biological Reserve, 5)

230. Sergiolus montanus (Emerton), 1890

(nec montanus Emerton, 1909)

Sullivan (Merom Station, July 21, 1966, TAP)

Wilton Ivie of The American Museum of Natural History determined this specimen.

231. Sosticus insularis (Banks), 1895

Porter (Dunes Acres, 38, 39, 22; Ind. Dunes State Park, 22); Tippecanoe (Americus, July 27, 1967, TAP)

232. Zelotes duplex Chamberlin, 1922

Tippecanoe (Ross Biological Reserve, 5); Posey (Mount Vernon, Aug. 18, 1966, TAP); Spencer (Santa Claus, May 22, July 24, 1966, RWM)

233. Zelotes hentzi Barrows, 1945

Fountain (Attica, Aug. 25, 1967, TAP); Warren (S. Pine Creek, Apr. 13, 1968, GRF)

The writer's specimen was determined by Wilton Ivie of The American Museum of Natural History.

This species, which occurs in the West, may be synonymous to Zelotes melancholica (Thorell), 1877, according to Kaston (32).

234. Zelotes laccus (Barrows), 1919

Tippecanoe (Ross Biological Reserve, 5; Merritt's Pine Plantation, July 20, 1968, RWM)

235. Zelotes subterraneus (C. L. Koch), 1839

Z. ater (Hentz), 1832

Crawford (Wyandotte, *Apr. 17*, 2, 21, 22); Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22); Fulton (Rochester, *Sept. 16*, 1967, TAP)

The writer has arbitrarily assigned the record of Banks (2) and Elliott (20, 21, 22) to Zelotes subterraneus. Hentz (28) probably had two species when he described Herpyllus ater. The writer refers the reader to Kaston (32), pages 356 and 357, for a discussion of this taxonomic problem.

FAMILY Clubionidae

236. Agroeca minuta Banks, 1895

Wayne (Richmond, 21, 22); Steuben (Crooked Lake, 21, 22); Porter (Ogden Dunes, 39, 22)

237. Agroeca pratensis Emerton, 1890

Marshall (Arlington, 2, 21, 22); INDIANA (49)

238. Castianeira cingulata (C. L. Koch), 1842

Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22); LaPorte (Smith, 39, 22); Tippecanoe (Ross Biological Reserve, 5; Americus, Aug. 10, 1967, TAP)

239. Castianeira descripta (Hentz), 1847

Tippecanoe (Lafayette, 25, 22); Putnam (Greencastle, 2, 21, 22); Fountain (Attica, Aug. 25, Sept. 7, 1967, TAP); Huntington (Huntington, July 27, 1967, TAP)

240. Castianeira longipalpus (Hentz), 1847

Kosciusko (Tippecanoe Lake, Aug. 17, 2, 21, 22); Knox (July 2, 2, 21, 22); Wayne (Richmond, 20, 21, 22, 39); LaPorte (Smith, 39, 22)

241. Castianeira trilineata (Hentz), 1847

INDIANA (40, 49); Porter (Dunes Acres, 38, 39, 22)

Marx (40) recorded this species for Indiana, not Hentz, as Elliott (22) has indicated. Elliott (22) lists Fox as having recorded this species from Lafayette. Actually Fox (25) obtained his Lafayette record from Marx's catalogue, as he states in a footnote at the bottom of page 268.

242. Chiracanthium inclusum (Hentz), 1847

Knox (Vincennes, Aug. 23, 2, 21, 22)

243. Clubiona abbotii L. Koch, 1866

Tippecanoe (Lafayette, 25, 22, Apr. 22, 1968, TAP; Americus, June 23, 1966, TAP); Marshall (Arlington, June 10, 2, 21, 22); INDIANA (49); Huntington (Huntington, June 29, 1966, TAP); Sullivan (Merom Station, July 20, 1966, July 18, 1967, TAP); Fountain (Attica, Aug. 3, 1966, Sept. 7, 1967, July 4, 1968, TAP)

244. Clubiona elizabethae Kaston, 1945

Tippecanoe (Ross Biological Reserve, 5)

245, Clubiona obesa Hentz, 1847

Wayne (Richmond, 20, 21, 22); Porter (Valparaiso, 21, 22; Ogden Dunes, 39, 22); LaPorte (Smith, 39, 22); Huntington (Huntington, June 28, 1966, TAP); Posey (Mount Vernon, June 7, 1967, TAP)

246. Clubiona pallens Hentz, 1847

Wayne (Richmond, 20, 21, 22, 39); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22); LaPorte (Smith, 39, 22); Tippecanoe (Ross Biological Reserve, 5)

247. Clubiona plumbi Gertsch, 1941

Gibson (Mt. Carmel, July 27, 1966, TAP); Tippecanoe (Americus, Aug. 1, 1967, TAP)

248. Clubiona pygmaea Banks, 1892

Tippecanoe (Americus, June 23, 1966, TAP)

249. Clubiona riparia L. Koch, 1866

Cass (Logansport, Aug. 3, 1967, TAP)

250. Clubiona tibialis Emerton, 1890

Cass (Logansport, July 6, 1966, TAP); Gibson (Mt. Carmel, July 27, 1966; TAP); Fountain (Attica, Aug. 3, 1966, TAP); Posey (Mt. Vernon, Aug. 18, 1966, June 7, 1967, TAP); Carroll (Delphi, Aug. 3, 1967, TAP); Fulton (Rochester, July 27, 1967, TAP)

251. Clubiona tribola Banks, 1907

Crawford (Wyandotte, 2, 3 49, 21, 22)

This species was described as new by Banks (2) on the basis of one female. It was taken at Wyandotte, not in Wyandotte Cave, as Petrunke-vitch (49) has indicated.

252, Meriola decepta Banks, 1895

Tippecanoe (Ross Biological Reserve, 5)

253. Micaria aurata (Hentz), 1847

Porter (Dunes Acres, 39, 22; Ind. Dunes State Park, 22)

254. Micaria montana Emerton, 1890

Porter (Dunes Acres, 38)

255. Phrurolithus similis Banks, 1895

Wayne (Richmond, 20, 21, 22)

256. Phrurotimpus alarius (Hentz), 1847

Phrurolithus palustris Banks, 1892

Posey (Grand Chain, May 12, 2, 21, 22); Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Porter (Ogden Dunes, 39, 22); Tippecanoe (Ross Biological Reserve, 5); Spencer (Santa Claus, May 8, 15, 22, 29, June 5, 12, 26, July 11, 14, Aug. 15, 1966, RWM)

257. Phrurotimpus borealis (Emerton), 1911

Spencer (Santa Claus, June 5, 1966, RWM); Gibson (Mt. Carmel, Sept. 23, 1967, TAP)

258. Phrurotimpus minutus (Banks), 1892 Spencer (Santa Claus, Sept. 4, 1966, RWM)

259. Trachelas tranquillus (Hentz), 1847

Tippecanoe (Lafayette, 25, 22, Sept. 26, 1966, TAP; West Lafayette, Sept. 30, 1966, JWB); Kosciusko (Tippecanoe Lake, June 8, 2, 21, 22); Putnam (Greencastle, 2, 21, 22); Dubois (Huntingburg, 2, 21, 22); Wayne (Richmond, 20, 21, 22, 39); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ind. Dunes State Park, 22); Bartholomew (Columbus, Oct. 25, 1967, TAP)

260. Zora pumila (Hentz), 1850

Tippecanoe (Ross Biological Reserve, 5)

FAMILY Anyphaenidae

261. Anyphaena celer (Hentz), 1847

LaPorte (Smith, 39, 22); Porter (Ogden Dunes, 39, 22; Ind. Dunes State Park, 22); Tippecanoe (Ross Biological Reserve, 5)

262. Anyphaena fraterna (Banks), 1893

Tippecanoe (Ross Biological Reserve, 5); Warren (South Pine Creek, May 5, 1968, GRF)

263. Anyphaena pectorosa L. Koch, 1866

Wayne (Richmond, 20, 21, 22, 39); LaPorte (Smith, 39, 22)

264. Anyphaenella saltabunda (Hentz), 1847

Wayne (Richmond, 20, 21, 22); Porter (Valparaiso, 21, 22); Brown (Nashville, 21, 22); Tippecanoe (Ross Biological Reserve, 5; Ent. Research Area, July 24, 1968, MKP)

265. Aysha gracilis (Hentz), 1847

Anyphaena rubra Emerton, 1890

Tippecanoe (Lafayette, 25, 22; Ross Biological Reserve, 5); Lake (Hammond, June 16, 2, 21, 22); Fountain (Veedersburg, May 12, 2, 21, 22); INDIANA (49); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22); LaPorte (Smith, 39, 22)

This species is not synonymous with *Microthena gracilis* Walck. (sic), *Acrosona gracilis* Walck. (sic), and *Epeira rugosa* as Elliott (22) has indicated.

266. Sillus conspersa (Keyserling), 1887

Anyphaena conspersa Keyserling, 1887

Lake (Hessville, 53; Liverpool, 53)

F.O.P.—Cambridge erected the genus *Sillus* in 1900, not in 1896, as Petrunkevitch (49) has indicated.

FAMILY Thomisidae

267. Coriarachne lenta (Walckenaer), 1837

Xysticus versicolor (Keyserling), 1880

Crawford (Wyandotte, Apr. 17, 2, 21, 22); Posey (Grand Chain, Apr. 19, 2, 21); Parke (Mecca, Apr. 27, 2, 21, 22); Floyd (New Albany, May 4, 2, 21, 22); Putnam (Greencastle, 2, 21, 22); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22); LaPorte (Smith, 39, 22)

Banks (2) did not record this species from Vincennes as Elliott (22) has indicated.

268. Ebo latithorax Keyserling, 1883

Porter (Dunes Acres, 38, 39, 22; Ind. Dunes State Park, 22); Tippecanoe (Ross Biological Reserve, 5)

269. Ebo pepinensis Gertsch, 1933 Porter (Ogden Dunes, 39, 22)

270. Misumena calycina (Linnaeus), 1758

Tippecanoe (Ross Biological Reserve, 5); Huntington (Huntington, June 29, 1966, TAP)

721. Misumenoides formosipes (Walckenaer), 1837

M. aleatorius (Hentz), 1847

Steuben (Lake James, May 8, 2, 21, 22); Lake (Hammond, July 30, 2, 21, 22); Posey (Grand Chain, Sept. 5, 2, 21); Putnam (Greencastle, 2, 21, 22); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22); LaPorte (Smith, 39, 22); Tippecanoe (Ross Biological Reserve, 5); Sullivan (Merom Station, July 20, 1966, TAP); Cass (Logansport, July 6, 1966, TAP); Pulaski (Winamac, Aug. 22, 1967, TAP)

Banks (2) did not record this species from Vincennes as Elliott (22) has indicated.

272. Misumenops americanus (Keyserling), 1880

Starke (Bass Lake, *June 17*, 2, 21, 22); Posey (Grand Chain, *June 3*, 2, 21, 22); Fountain (Attica, *June 20*, 2, 21, 22); Marshall (Culver, *June 29*, 2, 21, 22); Knox (*July 2*, 2, 21, 22); Putnam (Greencastle, 2, 21, 22); Porter (Valparaiso, 21, 22)

273. Misumenops asperatus (Hentz), 1847

Crawford (Wyandotte, June 23, Sept. 20, Apr. 17, 2, 21, 22); Posey (New Harmony, May 6, 2, 21, 22); Lake (Pine, May 25, 2, 53, 21, 22; Miller, 53; Clark, 53; Hessville, 53; Liverpool, 53; Dubois (Huntingburg, 2, 21, 22); LaPorte (Otis, 53; Smith, 39, 22); Porter (Woodville, 53; Ind. Dunes State Park, 53, 22; Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22); Wayne (Richmond, 20, 21, 22, 39); Tippecanoe (Ross Biological Reserve, 5)

274. Misumenops oblongus (Keyserling), 1880

Fountain (Veedersburg, May 12, 2, 21, 22; Attica, Aug. 3, 1966, TAP), Kosciusko (Vawter Park, June 1, 2, 21, 22); Putnam (Greencastle, 2, 21, 22); INDIANA (49); Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22); LaPorte (Smith, 39, 22); Posey (Mount Vernon, June 8, 1967, TAP); Gibson (Mount Carmel, July 27, 1966, TAP)

275. Oxyptila americana Banks, 1895 LaPorte (Smith, 39, 22) 276. Oxyptila barrowsi Gertsch, 1939

Lake (Pine, Oct. 29, NB, 27); Fulton (Rochester, July 27, 1967, TAP); Tippecanoe (Americus, July 27, 1967, TAP)

The male holotype of this species was taken at Pine, Indiana, by Nathan Banks in 1907. He recorded it as O. conspurcata Thorell, 1877. Gertsch described O. barrowsi in 1939, using Banks' Pine, Ind., record as the holotype. Dr. Gertsch determined both of the writer's male specimens.

277. Oxyptila conspurcata Thorell, 1877

Knox (May 26, 2, 21, 22; Cypress Swamp, Sept. 25, 2, 21, 22); INDIANA (49); Tippecanoe (Ross Biological Reserve, 5)

Gertsch (27) found that Banks' Pine, Ind., collection was Oxyptila barrowsi n.sp.

278. Oxyptila monroensis Keyserling, 1883 Wayne (Richmond, 20, 21, 22)

279. Philodromus abbotii Walckenaer, 1837

P. marxii Keyserling, 1889

P. ornatus Banks, 1892

Posey (Arlington June 10, 2, 21, 22); LaPorte (Wilders, July 25, 2, 21, 22; Smith, 39, 22); INDIANA (49)

280. Philodromus alasciensis Keyserling, 1883

Lake (Miller, 53; Pine, 53); Porter (Ind. Dunes State Park, 53, 22; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22)

The preferred spelling of this species is as above, not P. alaskensis, as Shelford (53) has indicated.

281. Philodromus cespiticolis Walckenaer, 1802

P. aureolus (of most authors)

Lake (Hammond, June 16, 2, 21, 22, 19); Knox July 2, 2, 21, 22, 19; Vincennes, Aug. 23, 2, 21, 22); INDIANA (49); Porter (Dunes Acres, 38, 39, 22, 19; Ogden Dunes, 39, 22, 19); Tippecanoe (Americus, June 23, 1966, TAP); Carroll (Delphi, July 7, 1966, TAP); Posey (Mount Vernon, 19, Aug. 18, 1966, June 8, 1967, TAP); Gibson (Mount Carmel, July 27, 1966, TAP); Sullivan (Merom Station, July 20, 21, 1966, TAP); Vermillion (Clinton, July 14, 1966, TAP); Pulaski (Winamac, June 16, 1966, Aug. 22, 1967, TAP); Fountain (Attica, July 25, 1967, TAP); Fulton (Rochester, July 27, 1966, TAP)

282. Philodromus imbecillus Keyserling, 1880

Porter (Dunes Acres, 38)

283. Philodromus keyserlingi Marx, 1890

P. washita Banks, 1932

Posey (Arlington, June 10, NB, 19); Huntington (Huntington, June 28, 1966, TAP), Vermillion (Clinton, July 20, 1967, TAP)

Dondale (19) considers *P. washita* a synonym of *P. keyserlingi* Marx, 1890, whereas Kaston (32) considers them distinct species. The writer considers them synonymous. Banks (2) originally recorded this species as *Philodromus placidus* Banks, 1892.

284. Philodromus pernix Blackwall, 1846

Kosciusko (Tippecanoe Lake June 17, 2, 21, 22); Posey (Grand Chain, June 3, July 8, 2, 21, 22); Lake (Pine, Oct. 29, 2, 21, 22; Miller, 53; Clark, 53); Knox (July 2, 2, 21, 22); Putnam (Greencastle, 2, 21, 22); Porter (Ind. Dunes State Park, 53, 22; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22); Wayne (Richmond, 21, 22); Pulaski (Winamac, June 15, 16, 1966, TAP); Tippecanoe (West Lafayette, Apr. 17, 1968, TAP); Benton (Otterbein, Apr. 29, 1968, JOS); LaPorte (LaPorte, June 19, 1968, TAP)

Banks (2) did not record this species from Vincennes, as Elliott (22) has indicated.

285. Philodromus placidus Banks, 1892

Knox (Vincennes July 10, 2, 21, 22); Posey (Grand Chain, May 12, July 8, 2, 21, 22); Lake (Pine, June 29, 2, 21, 22); Marshall (Culver, June 29, 2, 21, 22); Pulaski (Winamac, June 16, 1966, TAP)

286. Philodromus praelustris Keyserling, 1880

Starke (Bass Lake, Apr. 9, NB, 19)

Banks (2) originally recorded this collection as *Philodromus vulgaris* Hentz, which is a synonym of *Philodromus pernix*. Dondale (19) found that Banks' Bass Lake record was actually *Philodromus praelustris*.

287. Philodromus rufus Walckenaer, 1825

Kosciusko (Tippecanoe Lake, June 6, 2, 21, 22); Posey (Arlington, June 10, 2, 21, 22); Porter (Dunes Acres, 38, 39, 22); Tippecanoe (Ross Biological Reserve, 5); Fulton (Rochester, June 7, 1966, TAP); Pulaski (Winamac, June 16, 1966, TAP); Parke (June 26, 1967, TAP)

288. Philodromus satullus Keyserling, 1880

Wayne (Richmond, 20, 21, 22); Tippecanoe (Ross Biological Reserve, 5)

289. Philodromus thorelli Marx, 1889

Porter (Dunes Acres, 38, 39, 22)

290. Synema varians (Walckenaer), 1837

S. parvulum (Hentz), 1847

Posey (Arlington, June 10, 2, 21, 22; Grand Chain, May 12, 2, 21, 22); Fountain (Veedersburg, May 12, 2, 21, 22); Marshall (Culver, June 29, 2, 21, 22); INDIANA (49)

291. Thanatus formicinus (Olivier), 1789

Warren (Pine Village, June 1, 1968, TH)

292. Tibellus duttoni (Hentz), 1847

Lake (Pine, Oct. 29, 2, 21, 22); Kosciusko (2, 21, 22)

Tibellus duttoni (Hentz) is not synonymous with Tibellus oblongus (Walckenaer), as Elliott (21, 22) has indicated.

293. Tibellus maritimus (Menge), 1874

Porter (Dunes Acres, 38, 39, 22; Ind. Dunes State Park, 22)

294. Tibellus oblongus (Walckenaer), 1802

LaPorte (Wilders, July 25, 2, 21; Smith, 39, 22); Putnam (Greencastle, 2, 21, 22); Wayne (Richmond, 21, 22); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22); Brown (Nashville, 21, 22); Tippecanoe (Sept. 28, 1966, JDH); Cass (Logansport, July 6, 1966, TAP); Fulton (Rochester, July 27, 1967, TAP)

295. Tmarus angulatus (Walckenaer), 1837

Wayne (Richmond, 21, 22); Steuben (Crooked Lake, 21, 22); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22); LaPorte (Smith, 39, 22)

296. Tmarus rubromaculatus Keyserling, 1880 Tippecanoe (Ross Biological Reserve, 5)

297. Xysticus autificus Keyserling, 1880

Pulaski (Winamac, June 20, 1966, TAP); Tippecanoe (Americus, July 4, 1968, TAP)

Drs. Redner and Turnbull of the Research Institute at Belleville, Ontario, Canada determined the specimen taken at Winamac.

298. Xysticus banksi Bryant, 1933 LaPorte (Smith, 39, 22)

 $299. \ \ Xysticus\ bicuspis$ Keyserling, 1887

Tippecanoe (Merritt's Pine Plantation, Apr. 29, May 1, 8, 1968, RWM)

300. Xysticus discursans Keyserling, 1880. Sullivan (Sullivan, July 11, 1966, RWM)

301. Xysticus elegans Keyserling, 1880 Lake (Miller, 39); LaPorte (Smith, 39, 22)

302. Xysticus fraternus Banks, 1895

Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, (Greencastle, 2, 22); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22); LaPorte (Smith, 39, 22)

303. Xysticus gulosus Keyserling, 1880

LaPorte (Wilders, July 25, 2, 21 22; Smith, 39, 22); Putnam (Greencastle, 2, 22); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22); Tippecanoe (West Lafayette, Oct. 19, 1966, TAP)

304. *Xysticus luctans* (C. L. Koch), 1845 Kosciusko (2, 21, 22)

305. Xysticus punctatus Keyserling, 1880

X. formosus Banks, 1892

Lake (Pine, 53), Porter (Ind. Dunes State Park, 53)

306. Xysticus transversatus (Walckenaer), 1837

X. ferox (Hentz), 1847

INDIANA (40); Knox (Vincennes, Aug. 23, 2, 21, 22); Posey (Arlington, June 10, 2, 21, 22, June 7, 1967, TAP); Crawford (Wyandotte, July 25, 2, 21, 22); Starke (Bass Lake, June 22,

2, 21, 22); Marshall (Culver, June 29, 2, 21, 22); Putnam (Greencastle, 2, 21, 22); Wayne (Richmond, 20, 21, 22, 39); Porter (Valparaiso, 21, 22); LaPorte (Smith, 39, 22); Spencer (Santa Claus, May 8, 22, 29, June 12, 1966, RWM); Vanderburgh (Evansville, June 25, 1968, TAP)

307. Xysticus transversus Banks, 1892

Posey (New Harmony, Feb. 23, 2, 21, 22); INDIANA (49)

The writer does not consider this species a valid one. The description was based on a single, immature specimen. He must report it, however, since it was taken in Indiana.

308. Xysticus triguttatus Keyserling, 1880

Lake (Hammond, July 30, 2, 21, 22); LaPorte (Wilders, July 25, 2, 22), INDIANA (49); Wayne (Richmond, 21, 22); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22)

309. Xysticus tumefactus (Walckenaer), 1837

X. funestus Keyserling, 1880

X. nervosus Banks, 1892

Kosciusko (Tippecanoe Lake, June 6, 2, 21, 22); Marshall (Culver, June 29, 2, 21, 22); Putnam (Greencastle, 2, 21, 22); INDIANA (49); Wayne (Richmond, 20, 21, 22); Porter (Valparaiso, 21, 22); Harrison (Corydon, Oct. 29, 1967, TAP); Tippecanoe (West Lafayette, Oct. 4, 1967, TAP; Merritt's Pine Plantation, Oct. 30, 1967, RWM)

FAMILY Salticidae

310. Admestina tibialis (C. L. Koch), 1848

Porter (Ogden Dunes, 39, 22; Ind. Dunes State Park, 22); LaPorte (Smith, 39, 22)

311. Agassa cerulea (Walckenaer), 1837

A. cyanea (Hentz), 1845

Lake (Hammond, June 16, 2, 21, 22); INDIANA (49)

312. Attus rarus Hentz, 1846

Putnam (Greencastle, 2, 21, 22)

Petrunkevitch (49), page 730, says that the identification of this spider is impossible because of the meager description given by Hentz.

313. Attus rufus Hentz, 1846

Tippecanoe (Lafayette, 25, 22); Knox (Vincennes, July 10, 2, 21, 22); Crawford (Wyandotte, Sept. 9, 2, 21, 22); Starke (Bass Lake, June 17, 2, 21, 22); Posey (Grand Chain, July 8, 2, 21, 22); LaPorte (Wilders, July 25, 2, 21, 22); Dubois (Huntingburg, 2, 21, 22)

The status of *Attus rufus* Hentz, 1846 remains in question. Banks (3) synonymized this species with *Phidippus whitmani* Emerton, 1909. Kaston (32) following Petrunkevitch (49) states that *Attus rufus* Hentz is unknown to modern araneologists since the descriptions are too meager to place this spider in a proper genus.

Elliott (21, 22) synonymized A. rufus with P. whitmanii Peckham, 1909. The writer is convinced that Attus rufus Hentz must remain as is, and that Phidippus rufus Peckham, 1888 and Phidippus whitmanii Emerton, 1909 are synonyms of Phidippus whitmanii Peckham, 1909.

314. Evarcha hoyi (Peckham), 1883

Porter (Dunes Acres 38, 39, 22); Tippecanoe (Ross Biological Reserve, 5)

315. Habrocestum morosum (Peckham), 1888 Tippecanoe (Lafayette, 25)

316. Habrocestum pulex (Hentz), 1846

Tippecanoe (Lafayette, 25, 22; West Lafayette, June 20, 1966, TAP); Crawford (Wyandotte, Sept. 8, 2, 21, 22); INDIANA (49); Wayne (Richmond, 20, 21, 22, 39); Porter (Valparaiso, 21, 22; Ogden Dunes, 39, 22); LaPorte (Smith, 39, 22); Fulton (Rochester, July 27, 1967, TAP); Carroll, (Delphi, June 23, 1966, TAP); Vermillion (Clinton, July 20, 1967, TAP)

317. Habronattus agilis (Banks), 1893
Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind.
Dunes State Park, 22)

318. Habronattus borealis (Banks), 1895

Steuben (Crooked Lake, 21, 22); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22)

319. Habronattus calcaratus (Banks), 1904

Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22)

320. Habronattus decorus (Blackwall), 1846

Pellenes roseus (Hentz), 1846

Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22); Huntington (Huntington, July 27, 1967, TAP)

Hentz's description of *Attus roseus* was published in June of 1846, whereas Blackwall published his description of *Salticus decorus* in January of 1846.

321. Hasarius adansonii (Audouin), 1827 Sidusa borealis Banks, 1904 Porter (Dunes Acres, 39, 22; Ind. Dunes State Park, 22)

322. Hentzia ambigua (Walckenaer), 1837

Wala palmarum (Hentz), 1845

Lake (Hammond, May 29, June 16, July 30, 2, 21, 22; Pine, May 25, 2, 21, 22); Posey (Arlington, June 10, 2, 21, 22); INDIANA (49); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22); Huntington (Huntington, Aug. 15, 1967, TAP)

323. Hentzia mitrata (Hentz), 1845
Tippecanoe (Lafayette, 25); Posey (Arlington, June 10, 21, 22;
Grand Chain, May 12, June 3, July 8, 2, 21, 22); Martin (Shoals, May 16, 2, 21, 22); Fountain (Veedersburg, May 12, 2, 21, 22);
Kosciusko (Vawter Park, June 1, 2, 21, 22); INDIANA (49);

LaPorte (Otis, 53; Smith, 39, 22); Porter (Woodville, 53; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22)

324. Hyctia bina (Hentz), 1845

Posey (Mount Vernon, June 8, 1967, TAP)

This specimen was determined by Wilton Ivie of The American Museum of Natural History. He considers *Icius formosus* Banks, 1892 a synonym of *Hyctia bina*.

325. Hyctia pikei Peckham, 1888 Wayne (Richmond, 21, 22)

326. Icius elegans (Hentz), 1845

Tippecanoe (Lafayette, 25, 22); Lake (Hammond, May 29, 2, 21, 22); Posey (Arlington, June 10, 2, 21, 22); Knox (July 2, 2, 21, 22); Starke (Bass Lake, June 22, 2, 21, 22); Martin (Shoals, May 16, 2, 21, 22); Marshall (Culver, June 29, 2, 21, 22); Porter (Dunes Acres, 38, 22); LaPorte (Smith, 39, 22)

327. Icius hartii Emerton, 1891

Wayne (Richmond, 20, 21, 22, 39); Brown (Nashville, 21, 22); LaPorte (Smith, 39)

328. Icius similis Banks, 1895

Tippecanoe (West Lafayette, June 20, 1966, TAP)

329. Maevia inclemens (Walckenaer), 1837

M. vittata (Hentz), 1845

M. niger (Hentz), 1845

Tippecanoe (Lafayette, 25; Ross Biological Reserve, 5); Posey (Arlington, June 10, 2, 21, 22); Floyd (New Albany, 2, 21, 22); Lake (Hessville, 53; Liverpool, 53); Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Brown (Nashville, 21, 22); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22); LaPorte (Smith, 38, 22); Huntington (Huntington, June 29, 1966, TAP)

330. Marpissa undata (DeGreer), 1778

Marptusa familiaris Emerton, 1891

Tippecanoe (Lafayette, 25; Americus, June 23, 1966, TAP); Putnam (Greencastle, 2, 21, 22); Dubois (Huntingburg, 2, 21, 22); LaPorte (Smith, 39, 22; LaPorte, May 15, 1968, TAP)

331. Metaphidippus canadensis (Banks), 1897 Tippecanoe (Ross Biological Reserve, 5)

332. Metaphidippus flavipedes (Peckham), 1888
Tippecanoe (Ross Biological Reserve, 5)

333. Metaphidippus flavus (Peckham), 1888 Porter (Dunes Acres, 38, 39, 22)

334. Metaphidippus galathea (Walckenaer), 1837

Porter (Ogden Dunes, 39); Tippecanoe (Ross Biological Reserve, 5); Carroll (Delphi, July 7, 1966, TAP)

335. Metaphidippus protervus (Walckenaer), 1837

Dendryphantes capitatus (Hentz), 1845

D. octavus (Hentz), 1845

Tippecanoe (Lafayette, 25, 22; Ross Biological Reserve, 5); Lake (Hammond, May 29, June 16, July 30, 2, 21, 22; Pine, June 29, 2, 53, 21, 22); Marshall (Arlington, June 10, 2, 21, 22; Culver, June 29, 2, 21, 22); Posey (Grand Chain, May 12, June 3, 2, 21, 22); Crawford (Wyandotte, June 25, 26, 2, 21, 22); Starke (Bass Lake, June 22, 2, 21, 22); Martin (Shoals, May 16, 2, 21, 22); Fountain (Attica, June 20, 2, 21, 22; Veedersburg, May 12, 2, 21, 22); Floyd (New Albany, 2, 21, 22); Kosciusko (Vawter Park, June 1, 2, 21, 22); Porter (Ind. Dunes State Park, 53; Valparaiso, 21, 22; Dunes Acres, 38); Wayne (Richmond, 20, 21, 22); Steuben (Crooked Lake, 21, 22); Brown (Nashville, 21, 22); LaPorte (Smith, 39, 22)

336. Neon nellii Peckham, 1888

Wayne (Richmond, 20, 21, 22); Steuben (Crooked Lake, 21, 22); Brown (Nashville, 21, 22); Porter (Valparaiso, 21, 22)

337. Onondaga lineata (C. L. Koch), 1848

Tippecanoe (Ross Biological Reserve, 5)

338. Paraphidippus aurantius (Lucas), 1833

Attus multicolor Hentz, 1846

Putnam (Greencastle, 2, 21, 22); Knox (Vincennes, *July 10*, 2, 21, 22); Martin (Shoals, *July 13*, 2, 21, 22); Crawford (Wyandotte, *June 25*, 26, 2, 21, 22); Posey (Grand Chanin, *July 8*, 2, 21, 22)

339. Paraphidippus marginatus (Walckenaer), 1837

Dendryphantes militaris (Hentz), 1845

Tippecanoe (Lafayette, 25; Ross Biologoical Reserve, 5); Crawford (Wyandotte, June 25, 2, 21, 22); Lawrence (Mitchell, July 15, 2, 21, 22); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22); LaPorte (Smith, 39, 22); Fulton (Rochester, June 7, 1966, TAP)

340. Paraphidippus pineus Kaston, 1945

Tippecanoe (Ross Biological Reserve, 5); Vermillion (Clinton, June 13, 1966, TAP)

341. Pellenes arizonensis Banks, 1904

Porter (Ogden Dunes, 39, 22)

342. Phidippus audax (Hentz), 1844

Marion (Indianapolis, 31, 22); Tippecanoe (Lafayette, 25, 22, Oct. 23, 1966, RWM; West Lafayette, Sept. 20, 1966, AF, Sept. 31, 1966, TAP, May 15, 1968, KHK); Posey (Arlington, June 10, 2, 21, 22; New Harmony, May 6, Sept. 3, 2, 21, 22; Grand Chain, May 12, June 3, 2, 21, 22); Starke (Bass Lake, June 22, 2, 21, 22); Fountain (Attica, June 20, 2, 21, 22); Jennings (North Vernon, May 7, 2, 21, 22); Marshall (Culver, June 29, 2, 21, 22); Putnam (Greencastle, 2, 21, 22); Dubois (Huntingburg,

2, 21, 22); Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22); LaPorte (Smith, 39, 22); Benton (Otterbein, Apr. 25, 1968, JOS)

343. Phidippus cardinalis (Hentz), 1845

Jennings (North Vernon, Sept. 14, 2, 21, 22?); INDIANA (49) Banks (2) recorded this species from North Vernon, not Mount Vernon, as Elliott (22) has indicated.

344. Phidippus fraudulentus (Walckenaer), 1837

Dendryphantes insignarius (C. Koch), 1846

Lake (Hammond, June 16, 2, 21, 22); Posey (Arlington, June 10, 2, 21, 22); INDIANA (49); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22); LaPorte (Smith, 39, 22)

345. Phidippus mccookii (Peckham), 1883 Porter (Dunes Acres, 38, 39, 22)

346. Phidippus princeps (Peckham), 1883

P. brunneus Emerton, 1891

Porter (Dunes Acres, 38, 39, 22); LaPorte (Smith, 39, 22)

Lowrie (38, 39) reported *P. brunneus* Emerton, not *P. brunneus* F. Cambridge, as Elliott (22) has indicated. Emerton's *Phidippus brunneus* is a synonym of *Phidippus princeps* (Peckham), 1883.

347. Phidippus purpuratus Keyserling, 1884 Porter (Ogden Dunes, 39, 22)

348. Phidippus putnami (Peckham), 1883

Knox (July 2, 21, 22); Posey (Grand Chain, 2, 21, 22); INDIANA (49)

349. Phidippus rimator (Walckenaer), 1837

P. clarus Keyserling, 1884

Putnam (Greencastle, 2, 21, 22); Wayne (Richmond, 20, 21, 22, 39); Brown (Nashville, 21, 22); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22); LaPorte (Smith, 39, 22); Tippecanoe (July 26, 1967, TAP; Ross Biological Reserve, 5); Carroll (Delphi, Aug. 3, 1967, TAP)

Banks (2) recorded *Philaeus rimator* Peckham from Greencastle. As far as the writer can determine, *Philaeus rimator* is a synonym of *Philaeus rimator* (Walckenaer), 1837 and not of *Dendryphantes formosus* (Peckham), 1883, as Elliott (21, 22) has indicated. The writer bases his opinions on Petrunkevitch (49), pages 772 and 630.

350. Phidippus variegatus (Lucas), 1833 P. morsitans (Walckenaer), 1837 Tippecanoe (Lafayette, 25)

351. Phidippus whitmanii Peckham, 1909
Tippecanoe (Ross Biological Reserve, 5)

352. Phlegra fasciata (Hahn), 1831 P. leopardus (Hentz), 1846 Tippecanoe (Lafayette, 25); Posey (New Harmony Sept. 3, 2, 21, 22); INDIANA (49)

353. Salticus scenicus (Linnaeus), 1758

Tippecanoe (Lafayette, 25; West Lafayette, May 20, 1968, RWM); Wayne (Richmond, 21, 22); Posey (Mount Vernon, Aug. 18, 1966, TAP)

354. Sitticus palustris (Peckham), 1883

Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22)

355. Synemosyna lunata (Walckenaer), 1837

S. formica Hentz, 1845

Posey (Arlington, June 10, 2, 21, 22); Marshall, (Culver, June 29, 2, 21, 22); Wayne (Richmond, 20, 21, 22); Tippecanoe (Americus, Aug. 10, 1967, TAP); Franklin (Brookville, Sept. 1, 1966, RWM)

356. Talavera minuta (Banks), 1895

Porter (Ogden Dunes, 39, 22); Tippecanoe (Ross Biological Reserve, 5)

357. Thiodina iniquies (Walckenaer), 1837

T. sylvana (Hentz), 1845

T. retarius (Hentz), 1850

Crawford (Wyandotte, June 25, July 25, 2, 21, 22); Posey Grand Chain, June 3, 2, 21, 22); Dubois (Huntingburg, 2, 21, 22)

358. Zygoballus bettini Peckham, 1888

Knox (July 2, 2, 21, 22); INDIANA (49); Porter (Dunes Acres, 38, 39, 22; Ind. Dunes State Park, 22); LaPorte (Smith, 39)

Lowrie (39) collected this species at Smith, not Ogden Dunes, as Elliott (22) has indicated.

369. Zygoballus nervosus (Peckham), 1888

Porter (Dunes Acres, 39; Ogden Dunes, 39; Ind. Dunes State Park, 22)

FAMILY Dictynidae

360. Dictyna angulata Emerton, 1915

Tippecanoe (Ross Biological Reserve, 5)

361. Dictyna arundinaceoides Keyserling, 1883

Tippecanoe (Lafayette, 25, 22)

362. Dictyna bicornis Emerton, 1915

Porter (Ogden Dunes, 39, 22)

363. Dictyna bostoniensis Emerton, 1880

Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22)

364. Dictyna foliacea (Hentz), 1850

Lake (Miller, 53; Hessville, 53; Liverpool, 53; Clark, 53); LaPorte (Otis, 53; Smith, 39, 22); Porter (Woodville, 53; Ind.

Dunes State Park, 53, 22; Valparaiso, 21, 22; Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22); Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22)

365. Dictyna formidolosa Gertsch & Ivie, 1936

D. armata Banks, 1911 (armata preoc. by Thorell, 1875)

Tippecanoe (Ross Biological Reserve, 5)

366. Dictyna frondea Emerton, 1888

Lake (Hammond, May 29, 2, 21, 22); Marshall (Arlington, June 10, 2, 21, 22); INDIANA (49); Porter (Dunes Acres, 38, 39, 22; Ogden Dunes, 39, 22; Ind. Dunes State Park, 22)

Chamberlin and Ivie (12) consider Dictyna foliacea and Dictyna frondea separate species, whereas Kaston (32) considers them synonymous.

367. Dictyna maxima Banks, 1892

Tippecanoe (Ross Biological Reserve, 5)

368. Dictyna minuta Emerton, 1888

Wayne (Richmond, 20, 21, 22); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22)

369. Dictuna sublata (Hentz), 1850

Kosciusko (Tippecanoe Lake, June 8, 2, 21, 22; Vawter Park, June 1, 2, 21, 22); Posey (Grand Chain, June 3, 2, 21, 22; Mount Vernon, Aug. 18, 1966, June 8, 1967, TAP); Wayne (Richmond, 20, 21, 22); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22); Tippecanoe (Ross Biological Reserve, 5; Americus, June 23, 1966, TAP); Fulton (Rochester, June 7, 1966, Sept. 16, 1967, TAP); Pulaski (Winamac, June 15, 16, 1966, TAP); Huntington (Huntington, June 29, 1966, TAP); Cass (Logansport, July 6, 1966, Aug. 3, 1967, TAP); Gibson (Mount Carmel, July 27, 1966, TAP); Sullivan (Merom Station, July 21, 1966, July 18, 1967, TAP); LaPorte (LaPorte, June 19, 1968, TAP)

370. Dictyna volucripes Keyserling, 1881

Porter (Dunes Acres, 38, 39, 22); LaPorte (Smith, 39, 22)

371. Lathys foxii (Marx), 1891

Wayne (Richmond, 20, 21, 22)

372. Scotolathys maculatus (Banks), 1900

Tippecanoe (Ross Biological Reserve, 5)

373. Scotolathys pallidus (Marx), 1891

Lathys pallida (Emerton), 1894

Wayne (Richmond, 20, 21, 22); Tippecanoe (Ross Biological Reserve, 5)

FAMILY Uloboridae

374. Hyptiotes cavatus (Hentz), 1847

Tippecanoe (Lafayette, 25, 22); Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Porter (Ogden Dunes, 38, 22); LaPorte (Smith, 39, 22)

375. Uloborus glomosus (Walckenaer), 1841

U. americanus (of most authors)

Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); Porter (Valparaiso, 21, 22; Ogden Dunes, 39, 22); LaPorte (Smith, 39, 22)

Chamberlin and Ivie (12) page 139, say that *Uloborus americanus* Walckenaer, 1841 is a synonym of *Thanatidius americanus* (Walckenaer), 1841. *T. americanus* is in the family Pisauridae.

The *U. americanus* of most authors is actually *U. glomosus* (Walckenaer), 1841. Kaston (32), page 513, states, "According to Chamberlin and Ivie (1944) *americanus* is another species and ours is really *glomosus* Walckenaer 1841."

FAMILY Amaurobiidae

376. Amaurobius bennetti (Blackwall), 1846

Monroe (Mayfield's Cave, 4, 22; Truett's Cave?, 2, 21, 22); Wayne (Richmond, 20, 21, 22, 39); Steuben (Crooked Lake, 21, 22); LaPorte (Smith, 39, 22); Putnam (Bainbridge, Apr. 23, 1967, TAP)

Banta (4), page 59, collected two specimens of this species in Mayfield's Cave. He makes no mention of a Truett's Cave collection. Banks (2) determined Banta's specimens and reported them from Truett's Cave. Banks was in error; he should have reported this species from Mayfield's Cave, not from Truett's Cave.

377. Amaurobius ferox (Walckenaer), 1837

Tippecanoe (Lafayette, 25, 22); White (Brookston, June 12, 1968, TH)

378. Titanoeca americana Emerton, 1888

Wayne (Richmond, 20, 21, 22, 39); Porter (Dunes Acres, 38, 39, 22; Ind. Dunes State Park, 22); Tippecanoe (Merritt's Pine Plantation, May 12, 1967, RWM)

Appendix I

NB—Banks, Nathan CB—Bates, Cova JWB—Brewer, J. Wayne JJD—Davis, John J. RED—Dolphin, Robert E. JJF—Favinger, John J. GRF—Finni, Gary R. AF—Frishman, Austin RLG—Giese, Ronald L. JDH—Hacker, Jan D. TH—Henry, Thomas TRH—Hintz, Thomas R.

KHK—Knauer, Kenneth H.
GL—LaRocca, George
RWM—Meyer, Robert W.
DJM—Miller, Dale J.
MKP—Parker, Martha K.
TAP—Parker, Thomas A.
ES—Saugstad, Ed
JOS—Sillings, John O.
HS—Speith, H.
JEW—Wappes, James E.
GLW—Ward, Gertrude L.
DEW—Weaver, Dix E.

Appendix II

Obscure Collecting Localities

Americus, Tippecanoe County—The collections were made along the Tippecanoe River, approximately one mile upstream from the junction of the Tippecanoe and Wabash Rivers.

Arlington, Marshall County—Banks (2) states that this town was in Marshall County, not the Arlington in Rush County. The writer cannot determine its exact location in the county.

Buffington, Lake County—This town was formerly called Edgemoor and was located in section 26 of Calumet Township. It was later taken into Gary.

Clark, Lake County—This town was located on the eastern edge of North Township which is now Hammond.

Cypress Swamp, Knox County—This area, also known as Great Cypress Swamp, is approximately two miles northeast of the confluence of the Wabash and White Rivers.

Entomological Research Area, Tippecanoe County—This collecting area is part of the Horticultural Farm which lies approximately two miles west of the Purdue Campus on Sharon Chapel Road.

Grand Chain, Posey County—This area is approximately eight miles south of New Harmony along the Wabash River.

Hessville, Lake County—This town, which was in North Township, is now part of Hammond.

Liverpool, Lake County—This town is located at the western edge of Hobart Township.

Merritt's Pine Plantation, Tippecanoe County—This privately-owned Christmas tree plantation is located approximately ¾ mile east of the Wildcat Creek bridge on the south side of State Road 25.

Miller, Lake County—This town was located in section 6 of Hobart Township and is now part of Gary.

Mount Carmel, Gibson County—Although Mount Carmel is actually situated on the west bank of the Wabash River (Illinois), all collections were made on the east bank of the river (Indiana).

Mount Vernon, Posey County—All collections were made along the east bank of the Wabash River which is approximately eight miles due west of Mount Vernon. The Mount Vernon record for *Loxosceles reclusa* was taken in the town, not along the Wabash.

Otis, LaPorte County—This town is in New Durham Township.

Pine, Lake County—This town was situated along Lake Michigan and is now the north end of Clark Street in Gary.

Ross Biological Reserve, Tippecanoe County—This preserved area lies along the Wabash River adjacent to the staff recreation area, "The Hills." These areas are located approximately ten miles southwest of West Lafayette.

Smith, LaPorte County—This small town is located at the fork of Fail Road where it turns into 175 East Road and 125 East Road, 1.2 miles east of Tee Lake in Galena Township. The town is approximately 15 miles due east of Michigan City.

Woodville, Porter County—This town is in Liberty Township which is north of Valparaiso.

Literature Cited

- BANKS, N. 1897. Indiana caves and their fauna, p. 202-204. In: Indiana Dept. Geol. Natur. Resources, 21st Annual Report for 1896. Indianapolis.
- 2. ———. 1907. A preliminary list of the Arachnida of Indiana with keys to the families and genera of spiders, p. 715-747. In: Indiana Dept. Geol. Natur. Resources, 31st Annual Report for 1906. Indianapolis.
- 3. ————. 1910. Catalogue of Nearctic spiders. Bull. U. S. Nat. Mus. 72:1-80.
- 4. Banta, A. M. 1907. The fauna of Mayfield's Cave. Carnegie Inst. Wash. 67:1-114.
- 5. BECKER, H. 1951. A quantitative study of the vertical distribution of spiders of the Ross Biological Reserve. Unpublished M.S. Thesis, Purdue University. 63 p.
- 6. BLATCHLEY, W. S. 1897. Indiana caves and their fauna, p. 121-212. In: Indiana Dept. Geol. Natur. Resources, 21st Annual Report for 1896. Indianapolis.
- CAMBRIDGE, F. O. P. 1897-1905. Arachnida, Araneida. Vol. II, in Biologia Centrali-Americana. R. H. Porter, London. 610 p.
- 8. CAMBRIDGE, O. P. 1889-1902. Arachnida, Araneida. Vol. I, in Biologia Centrali-Americana. R. H. Porter, London. 317 p.
- 9. Chamberlin, R. V. 1922. The North American spiders of the family Gnaphosidae. Proc. Biol. Soc. Wash. 35: 145-172.
- CHAMBERLAIN, R. V., and W. IVIE. 1942. A hundred new species of American spiders. Bull Univ. Utah 32(13); Biol. Series7(1):1-117.
- 11. ————. 1943. New genera and species of North American linyphiid spiders. Bull. Univ. Utah 33(10); Biol. Series 7(6):1-39.
- 12. ________. 1944. Spiders of the Georgia region of North America. Bull. Univ. Utah 35(9); Biol. Series 8(5):1-267.
- CHICKERING, A. M. 1957. The genus *Tetragnatha* (Araneae, Argiopidae) in Jamaica, B.W.I., and other neighboring islands. Brevoria, Mus. Comp. Zool. 68:1-15.
- 14. ————. 1959. The genus Tetragnatha (Araneae, Argiopidae) in Michigan, Bull. Mus. Comp. Zool. 119(9):475-499.
- 15. ———. 1962. The genus Tetragnatha (Araneae, Argiopidae) in Jamaica, W. I. Bull. Mus. Comp. Zool. 127(8):423-450.
- 16. Comstock, J. H. 1912. The spider book. Garden City, N. Y. 725 p.
- 17. ————. 1940. The spider book. Revised and edited by W. J. Gertsch. Doubleday, Doran and Co., New York. 729 p.
- 18. COPE, E. D. 1872. On the Wyandotte Cave and its fauna. Amer. Natur. 6:406-422.
- Dondale, C. D. 1961. Revision of the aureolus group of the genus Philodromus (Araneae: Thomisidae) in North America, Can. Entomol. 93(3):199-222.
- Elliott, F. R. 1930. An ecological study of the spiders of the beech-maple forest, Ohio J. Sci. 30:1-22.

- 1932. Revisions and additions to the list of Araneae (spiders) of Indiana. Proc. Indiana Acad. Sci. 41:419-430.
- 22. ______. 1953. The araneology of Indiana. Proc. Indiana Acad. Sci. 62:299-317.
- EMERTON, J. H. 1875. Notes on spiders from caves in Kentucky, Virginia, and Indiana, Amer. Natur. 9:278-281.
- 24. ———. 1912. Four burrowing Lycosa (Geolycosa Montg. Scaptocosa Banks) including one new species. Psyche 19:25-36.
- Fox, W. H. 1892. A list of spiders from Indiana. Proc. Entomol. Soc. Wash., D. C. 2(2):267-269.
- Gertsch, W. J. 1933. Diagnosis of new American spiders. Amer. Mus. Novitates 637:1-14.
- 1939. A revision of the typical crab-spiders (Misumeninae) of America north of Mexico. Bull. Amer. Mus. Natur. Hist. 76:277-442.
- Hentz, N. M. 1832. On North American spiders. Amer. J. Sci. Arts 21(1):99-109.
- 1847. Descriptions and figures of the Araneides of the United States, J. Boston Soc. Natur. Hist. 5:443-478.
- 30. ________. 1850. Descriptions and figures of the Araneides of the United States. J. Boston Soc. Natur. Hist. 6:18-35, 271-295.
- 31. Hentz, N. M., ed. S. Scudder. 1867. Supplement to the descriptions and figures of the Araneides of the United States. Proc. Boston Soc. Natur. Hist. 11:103-111.
- 32. Kaston, B. J. 1948. Spiders of Connecticut. Conn. State Geol. and Natur. Hist. Survey Bull. 70:1-874.
- 33. Kinter, E. 1935. Some spiders of the genus *Tetragnatha*. Proc. Indiana Acad. Sci. 44:207-209.
- 34. Levi, H. W. 1951. New and rare spiders from Wisconsin and adjacent states. Amer. Mus. Novitates 1501:1-41.
- 35. ———. 1959. The spider genus *Latrodectus* (Araneae, Theridiidae). Trans. Amer. Microscopical Soc. **78**(1):7-43.
- Levi, H. W., and H. M. Field. 1954. The spiders of Wisconsin. Amer. Midl. Natur. 51:440-467.
- 37. LINDSEY, A. A., R. O. PETTY, W. VANASDEL, and D. K. STERLING. 1960. Vegetation and environment along the Wabash and Tippecanoe Rivers. Ecol. Mono. 31:105-156.
- 38. Lowrie, D. C. 1942. The ecology of the spiders of the xeric dunelands in the Chicago area, Bull. Chicago Acad. Sci. 6(9):161-189.
- 39. ______. 1948. The ecological succession of spiders of the Chicago area dunes. Ecology 29(3):334-351.
- MARX, G. 1890. Catalogue of the described Araneae of temperate North America. Proc. U.S. Nat. Mus. 12:497-594.
- 41. МсСоок, Н. С. 1894. American spiders and their spinningwork. Vol. III. Acad. Natur. Sci. Philadelphia. 406. p.
- 42. McCrone, J. D., and H. W. Levi. 1964. North American widow spiders of the *Latrodectus curacaviensis* group (Araneae: Theridiidae). Psyche **71(1)**:12-27.
- McIndoo, N. E. 1910. Biology of the Shawnee Cave spiders. Biol. Bull. Woods Hole, Mass. 19(6):303-323.
- Holes on some arachnids from Ohio Valley caves. Biol. Bull. Woods Hole, Mass. 20(3):183-186.
- Minton, S. A. 1956. The trap-door spider Pachylomerides adouinii, in southern Indiana. Proc. Indiana Acad. Sci. 64:255.

- MINTON, S. A., and C. OLSON. 1964. A case of spider bite with severe hemolytic reaction. Pediatrics 33(2):283-284.
- PACKARD, A. S. 1875. The invertebrate cave fauna of Kentucky and adjoining states. Amer. Natur. 9:274-278.
- 48. ————. 1888. The cave fauna of North America, with remarks on the anatomy of the brain and origin of the blind species. Nat. Acad. Sci. Memoir 4:3-156.
- 49. Petrunkevitch, A. 1911. A synonymic index-catalogue of spiders of North, Central, and South America with all adjacent islands. Bull. Amer. Mus. Natur. Hist. 29:1-809.
- 50. ————. 1925. Descriptions of new or inadequately-known American spiders. Ann. Entomol. Soc. Amer. 18:313-322.
- 51, ————. 1939. Catalogue of American spiders. Part I. Conn. Acad. Arts Sci. 33:133-338.
- SEELEY, R. M. 1928. Revision of the spider genus Tetragnatha. Bull. New York State Mus. 278:99-147.
- SHELFORD, V. E. 1912. Ecological succession. IV. Vegetation and the control of land animal communities. Biol. Bull. 23:59-99.
- 54. WALLACE, H. K. 1942. A revision of the burrowing spiders of the genus Geolycosa. Amer. Midl. Natur. 27:1-62.
- 55. WILLIAMSON, E. B. 1900. Biological conditions of Round and Shriner Lakes, Whitley County, Ind. Proc. Indiana Acad. Sci. 9:151-155.