

A PRELIMINARY CHECKLIST OF SPIDERS OF NACOGDOCHES, TEXAS

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ABSTRACT

A preliminary checklist (heretofore unpublished) of 25 families, 90 genera, and 147 species of spiders found in Nacogdoches, Texas or in nearby areas is presented. Of these, 66 species were found in mud-dauber nests. *Smeringopus elongatus* (Vinson) is reported for the first time in the U. S. Fifty-one species are additions to the 577 species having been reported from Texas (Vogel, 1970). Two of the 12 additions to the Texas Salticidae species are reported by Carpenter (1972).

INTRODUCTION

This study was undertaken in 1970 to add new species records and new information to nearly 600 species of spiders previously reported from Texas (Vogel, 1970).

In 1940 Gertsch and Mulaik published the results of an eight-year study of spiders in over 100 counties in Texas. Thirty-eight of the 43 families known to exist at that time in America north of Mexico were found in Texas. Most of the studies in Texas have been in the Big Bend area, the lower Rio Grande (especially Hidalgo and Cameron counties), around Austin (Travis County) and Dallas (Dallas County) leaving many areas in Texas, such as Nacogdoches County, a complete void in the literature of spiders of Texas. Recently (Carpenter, 1972) a list of jumping spiders has been published from Wichita County. This list includes *Metaphidippus galathea* and *Hentzia palmarum*, which in my list are reported as additions to Vogel's list (1970).

Among the better literature sources available for the study of spiders today are Comstock (1912, revised by Gertsch, 1948), Kaston (1948), and Fitch (1963). Kaston (1972) also is helpful in identification of the spiders. Since 1940 numerous additions and revisions have been published with over 13,000 new species of spiders being named from North America alone between 1940 and 1966 (Vogel, 1967).

This list is not intended as a complete checklist of all the spiders in Nacogdoches, Texas, but rather a survey of spiders collected for the most part over a period of six months. These are known to be only a portion of the species that exist in the Nacogdoches area, because many spiders which could be collected in quantity by sweeping vegetation were bypassed in view of the lack of literature for identification and time involved in collecting them.

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RESULTS AND DISCUSSION

From March 1970, when the taxonomic study of spiders was begun, and throughout the next six months, *Achaearanea tepidariorum*, *Filistata hibernalis*, and *Scytodes* sp. could be found. In April other spiders began to appear, particularly the fast-running Lycosidae. From May through the fall, when the study was halted, the number of spiders that were available greatly exceeded the number which could be microscopically examined.

In early June the organ pipe mud dauber wasps, *Trypoxylon* sp., began building their nests. These continued to appear throughout the summer, but nests of the common mud dauber, *Sceliphron cementarium*, soon greatly outnumbered them. About the middle of August there was a sharp decline in the construction of all mud dauber nests. Many of these were found invaded by the wasp, *Chalybion* sp., which empties out fresh nests of mud daubers and provisions them with her own spiders. About 10 of the 60 *Sceliphron* nests examined had been invaded by *Chalybion*. A total of 75 *Sceliphron* and *Trypoxylon* nests were studied, but some were devoid of spiders or had only a few. *Trypoxylon* and *Sceliphron* nests were found in garages, under house eaves and rafters, under bridges and overpasses, and in other protected areas.

In the beginning of my study of spiders in mud dauber nests dried and dismembered specimens were cast aside. Later, dehydrated specimens were soaked in water about 10 hours and often were reconstituted well enough to enable complete identification. Colors of these spiders were far better than that of specimens preserved in alcohol. Several species were found such as *Mangora placida* and two male *Verrucosa arenata*, which would have been overlooked otherwise. The majority of the spiders in the nests were immature specimens, and many of these were not identified past genus.

Trypoxylon wasps showed a decided preference for species of *Neoscona*, but a few other spiders not found in other searches, such as the Bolas Spider, *Mastophora bisaccata*, were discovered in the nests. *Sceliphron* nests contained a tremendous variety of species.

Spiders in the recent mud dauber nests were alive but paralyzed, and ideal for studying and photographing. Spiders were either photographed when taken from these nests or, if found in other habitats, were anesthetized immediately before being photographed. After photographing the spiders, they were examined with a binocular microscope while anatomical features and colors were still in their natural state, observations recorded, and preserved in 75% ethanol. The spider specimens listed here are on loan at the Department of Biology, Stephen F. Austin State University, Nacogdoches, Texas, in the care of Dr. William W. Gibson.

Muma and Jeffers (1945) reported 10 families, 48 genera, and 81 species taken from mud dauber nests in Maryland. They reported that two-thirds of the spiders in *Chalybion* nests were Theridiidae. One-third of these were *Latrodectus mactans*, and one-tenth were *Achaearanea* [= *Theridion*] *tepidariorum*. I also found that nests invaded by *Chalybion* were filled predominantly with spiders of the family Theridiidae, but the majority of these were *A. tepidariorum* with only a few *L. mactans*.

Dorris (1970) reported 10 families, 23 genera, and 28 species found in a study of *Sceliphron* and *Trypoxylon* nests throughout Mississippi. Dorris (1970) and Muma and Jeffers (1945) reported that the *Trypoxylon* mud dauber had a preference for the genera *Neoscona* and *Eustala*.

In my study of spiders from mud dauber nests, in the summer of 1970, 10 families, 45 genera, and 67 species were identified although some of these are probably undescribed.

Thirty-four of these species were not included in the above reports of Muma and Jeffers (1945) and of Dorris (1970). This study also adds the families Oonopidae and Scytodidae to the above lists of spiders found in mud dauber nests. The families Araneidae and Salticidae were represented by more species than any other family. The mud daubers tended to gather those spiders that are normally the most conspicuous. Only Araneidae and a very few Salticidae and Theridiidae were found in the *Trypoxylon* nests.

Other spiders reported in this study were found in many habitats such as on the ground, in webs, dangling from drag lines, on vegetation, and in houses.

In this first preliminary checklist of spiders for the Nacogdoches area 25 families, 90 genera, and 147 species are reported. Not counting the genera for which species identification was not possible (unless that genus is otherwise entirely absent from the list) 51 species are additions to the 577 species reported from Texas by Vogel (1970).

In the following list the name of each taxon is followed by the author: state of development of specimen(s) examined, length in millimeters; situation in which collected; date; determiner. Unless otherwise stated, spiders were collected in Nacogdoches, Texas.

Explanation of abbreviations used in the list are as follows: Det. WJG, determined by Willis J. Gertsch; Det. BV, determined by Beatrice Vogel; Det. KMB, determined by Katharine M. Brown; S, *Sceliphron* mud dauber nest; SC, *Sceliphron* nest invaded by *Chalybion*; T, *Trypoxylon* mud dauber nest; IMM., immature; *, addition to the list of Vogel (1970); SFASU, Stephen F. Austin State University.

Agelenidae

Agelenopsis (Barronopsis) texana Gertsch: Female, 7mm, in grass near woods, 8 May 1970; Imm., 6mm, in grass in wooded lot, 17 June 1970; det. WJG.

**Agelenopsis naevia* (Walckenaer): Female, 17mm, in large funnel web across creek bed, 20 July 1970; det. WJG.

**Coras alabama* Muma: Females, 20.0mm, 9.5mm, 6.75mm, under boards in empty lot, 30 March 1970; det. WJG.

Amaurobiidae

Titanoeca americana Emerton: Imm., near warehouse, Center, Texas, 20 May 1970; det. WJG.

Anyphaenidae

Ayscha decepta Banks: Male, 4.5mm, in house, 11 September 1970; Female 7.2 mm in in S in garage, 5 August 1970; det. WJG.

Araneidae

**Acacesia hamata* (Hentz): Penultimate Males, 7mm, 3.5mm; Female, 7.5mm, in S in garage, 25 July, 1970; det. WJG.

Acanthepiera stellata (Marx): Male, 6mm, in SC in garage, 25 July 1970; det. BV. Imms., 4mm, 6mm, 6mm, 6.5mm, in SC under bridge, 8 July 1970; det. WJG.

**Araneus marmoreus* Clerck: Imm., 6mm, in SC under bridge, 8 July 1970; det. WJG.

Araneus pegnia Walckenaer: Male, 3mm, in S under house rafters, 25 June 1970; male, 4.5mm in S in garage, 5 August 1970; Female, 5mm, in S under house rafters, 25 June 1970; Female, 5mm in S under house rafters, 19 July 1970; Imm., 5mm in S in box in garage, 18 July 1970; det. WJG.

**Araneus sericatus* Clerck: Penultimate Male, 7.9mm; Female, 10.25mm; Penultimate Females, 10.5mm; Male, 7.9mm; Imm. Female, 6.5mm; Imm., 4.5mm; in webs by Lake Rayburn, Texas, 23 August 1970; det. WJG.

Argiope aurantia Lucas: Penultimate Male, 6.5mm; Subadult Female, 11.5mm; Imm. Female, 7mm; in S in garage, 25 July 1970; Subadult Female, 12mm, in web, 10 August 1970; det. WJG, KMB.

**Conepeira* sp. No. 1: Imm., 5mm, in S in garage, 5 August 1970; det. WJG.

**Conepeira* sp. No. 2, *mineatus* group: Female, 4.75mm, in S in garage, 5 July 1970; det. WJG.

Cyclosa turbinata (Walckenaer): Females, 5mm, 6mm, in small web in shrubs, 27 April 1970; det. WJG.

Eustala sp.: Penultimate Male, 10mm, in T under house eaves, 27 June 1970; det. WJG.

Eustala anastera (Walckenaer): Female, 5mm, in S in garage, 29 August 1970; det. BV.

Gasteracantha cancriformis L.: Females (red and white), in webs near creek, 8 September 1968; Female (red), 9mm, in web near house, 12 September 1970; Female (white), 9mm, in web behind warehouse, Center, Texas, 18 September 1970; det. WJG, KMB. Females (red and white) in webs 15 ft apart near trees, 30 September 1970; det. KMB.

Gea heptagon (Hentz): Female, 7mm, on sidewalk under T nest being made, 26 May 1970; Female, 6mm; Imm. Female, 5mm, in T under house rafters, 19 July 1970; det. WJG.

**Larinia directa* (Hentz): Imm, Females, 6.75mm, 4.5mm, in S under bridge, 8 July 1970; det. WJG.

Leucauge venusta (Walckenaer): Imms., 4mm, 6.5mm, in sloping webs between shrubs in SFASU Experimental Forest, 21 April 1970; Imm., 1.75mm, in sloping web in bushes, 14 May 1970; det. WJG.

**Mangora gibberosa* (Hentz): Female, 4mm, in S in garage, 25 July 1970; Female, 3.5mm, in fine closely meshed web, 30 August 1970; det. WJG.

**Mangora placida* (Hentz): in S in garage, partly eaten by *Sceliphron* larva, 25 July 1970; det. BV.

**Mastophora bisaccata* (Emerton): Imm. Female, in T in garage, 25 June 1970; det. WJG.

Mecynogea basilica (McCook): Female, 8mm, in T in garage, 10 June 1970; Female, 7.5mm, in S in garage, 3 July 1970; det. WJG.

Metepeira labyrinthea (Hentz): Males, 6mm, 5mm; Penultimate Male, 3.25mm; Females, 5mm, 6mm; Imm. Female, 6mm; in S in garage, 3 August 1970; Female, 7mm, in S in garage, 25 July 1970; det. WJG, BV.

Micrathena gracilis (Walckenaer): Females, 9mm, in orb webs by creek, 8 July 1970; det. WJG.

**Micrathena mitrata* (Hentz): Imm. Male, 4mm, in web near creek, 20 August 1970; det. WJG.

Micrathena sagittata (Walckenaer): Female, 11mm, running over twigs near creek, 22 August 1970; Imm., 6.5mm, in S in garage, 29 August 1970; det. WJG.

Neoscona arabesca (Walckenaer): Male, 4.5mm, in T in garage, 10 June 1970; Females, 8mm, 8mm, in T in garage, 10 June 1970; Female, 4.5mm, in S in garage, 25 July 1970.

Neoscona benjamina (Walckenaer): Females, 16mm, 11.5mm, by front door, Alpine, Texas, August 1970; Imm. Females, 7mm, 7mm, 9mm, in T in garage, 25 June 1970;

.Imm. Female, 8mm, in S in garage, 25 July 1970; Imm. Female, 10mm, in S in abandoned shack, 19 August 1970; Male, 10mm, in S in garage, 5 August 1970; det. WJG.

Neoscona minima F. Cambridge [= *N. arabesca* variant]: Male, 4.5mm, in S in garage, 16 August 1970; det. WJG.

**Nephila clavipes* (L.): Males, 5.25mm, 20.5mm, in same web in "Big Thicket" near Kountz, Texas, 3 October 1970; Female, 31mm, in web in SFASU Experimental Forest, 20 August 1970; det. WJG.

**Singa* sp. (could be *S. truncata* Banks): Females, 3.5mm, 3.5mm, in S under bridge, 8 July 1970; Female, 3mm, in S under house rafters, 19 July 1970; det. WJG.

Verrucosa arenata (Walckenaer): Males, in S in abandoned shack, 19 August 1970; Female, 7mm, in S in garage, 25 July 1970; det. BV.

Clubionidae

**Castianeira* sp., near *variata* Gertsch: Imm. Female, 6mm, on floor in house, 8 July, 1970; Imm., 5mm, in SC in abandoned shack, 27 June 1970; det. WJG.

**Castianeira* sp. No. 2: Female, 6.5mm, on ground near porch of house, 19 September 1970; det. WJG.

Chiracanthium inclusum (Hentz): Female, 5.2mm, in S in garage, 5 August 1970; det. BV.

Clubionoides excepta (Koch): Female, 7mm, on wall in house, June 1970; Female, 6mm, on bedroom ceiling, 10 July 1970; det. WJG.

**Meriola inornata* (Banks): Female (?), 4mm, on SFASU Science Building at night, 3 June 1970; det. WJG.

**Strotarchus piscatorius* (Hentz): Male, 6.5mm, running on ground, 25 April 1970; det. WJG.

**Trachelas tranquillus* (Hentz): Male 6.5mm, in house, 28 April 1970; det. WJG.

Ctenizidae

Myremeciophila comstocki Bishop and Crosby: Male, 15mm, under newspaper in garage, 14 October 1968; det. WJG.

Filistatidae

Filistata hibernalis Hentz: Males, 9mm; Females, 12-19.5mm, in barns, under rafters, under bridges and overpasses, in garages, in storerooms, throughout year; Female, 15mm, in warehouse, Center, Texas, 18 September 1970; det. WJG, KMB.

Filistatinella crassipalpus Gertsch: Female, 3mm, in barn on farm between Nacogdoches and Alto, Texas, July 1970; det. WJG.

Gnaphosidae

sp. [could be *imbecilla* (Keyserling)]: Male, 2.5mm, on ground near house, 24 May 1970; det. WJG.

**Callilepis* sp. No. 2.: Imm., 2.5mm, in evening on floor in house, 30 May 1970; det. WJG.

Cesonia bilineata (Hentz): Female, 5.5mm, in bathroom, 7 July 1971; det. WJG.

Drassyllus devexus Chamberlin: Male, 5.9mm, on ground in woods, 27 April 1970; Female, 6.5mm on floor in house, 30 April 1970; det. WJG.

Drassyllus mephisto Chamberlin: Female, 4mm, warehouse, Center, Texas, 24 May 1970; det. WJG.

Gnaphosa (Cylphosa) sericata (Koch): Male, 4mm, on ground near house, May 1970; Imm., 2.5mm, in house, May 1970; det. WJG.

**Herpyllus vasifer* (Walckenaer): Male, 6mm, on wall in house, 9 May 1970; Female, 8.2mm, on wall in house, 14 March 1970; Female, 7mm, on floor in house, 13 June 1970; det. WJG.

**Zelotes hentzi* Barrows: Male, 5mm; Female, 5mm, on patio in afternoon, 26 April 1970; det. WJG.

**Zelotes rusticus* Koch: Male, 8.5mm, on ground near house, 24 May 1970; Male, 8mm, on floor in house, 3 July 1970; det. WJG.

Linyphiidae

Eperigone sp. No. 1: Male, 2.5mm, in house, May 1970; det. WJG.

Eperigone sp. No. 2: Female, 2mm, in house at night, 20 May 1970; det. WJG.

Eperigone tridentata Emerton: Penultimate Male, 1mm, on wall in kitchen, 2 June 1970; Female, 1.75mm, on dragline in kitchen, 1 July 1970; Imm., 1mm, falling from rafter log boat house at Lake Striker near Rusk, Texas. 30 May 1970; det. WJG.

Erigoninae (not identified beyond subfamily): Imm., 1mm, blown by wind, 10 May 1970; Imm, 1mm, hanging by dragline in house, 16 May 1970; Imm, .75mm, blown by wind, 3 June 1970; det. WJG.

Erigone autumnalis Emerton: Male, 1.3mm, blown by wind, 5 June 1970; Male, 1.5mm, in rotting pine log 2 mi. N Nacogdoches, 14 June 1970; det. WJG.

**Florinda coccinea* (Hentz): Female, 3mm, in silk strands in bush, 10 May 1970; det. WJG.

Frontinella communis (Hentz): Male, 2.5mm, in bowl and doily web in woods, 7 May 1970; det. WJG.

**Meioneta* sp. No. 1: Male, 2mm, falling from tree on dragline, 14 May 1970; det. WJG.

**Meioneta* sp. No. 2: Female, 1.8mm, in old jar in bushes, 13 May 1970; det. WJG.

*Near *Meioneta* of Linyphiinae: Female, 1mm, hanging by dragline in house, 22 June 1970; det. WJG.

Loxoscelidae

Loxosceles reclusa Gertsch and Mulaik: Female, 9mm, in Center, Texas, warehouse, 20 May 1970; Imms., 4mm, 2mm, in empty lot under boards, 15 April 1970; Imm., 5.2mm, in closet, Palestine, Texas, August 1968; det. WJG, KMB.

Lycosidae

Lycosa antelucana Montgomery: Imm. Male, 11.5mm, in house, 24 March 1970; det. WJG.

Lycosa carolinensis Walckenaer: Male, 24mm, in New London, Rusk County, Texas, 11 June 1970; det. WJG.

Lycosa helluo Walckenaer: Male, 12mm, on floor in house, 22 June 1970; Female, 19mm, on ground in woods, 20 April 1970; det. WJG.

Lycosa rabida Walckenaer: Female, 18.5mm, in house, 15 June 1970; Imm., 12mm, in house, 13 May 1970; det. WJG.

Pardosa sp.: Imm. Male, 1.5mm, on patio, 10 May 1970; Imm., 2.5mm, in back yard, June 1970; Imm., 3mm, on floor in house, 29 May 1970; det. WJG.

Pardosa delicatula Gertsch and Wallace: Penultimate Male; Females, 4mm, 5mm, in

grass by house foundation, Beaumont, Texas, 6 June 1970; det. WJG.

**Pardosa milvina* (Hentz): Male, 4.5mm; Female, 5.5mm, edge of pond two mi. N Melrose, Texas, 27 March 1970; det. WJG.

Pirata sp.; Female, 3.25mm, in grass near house, Beaumont, Texas, 6 June 1970; det. WJG.

Schizocosa sp.: Male, 6mm, in woods, 29 April 1970; Male, 8mm, in woods on ground, 14 May 1970; Male, 6mm, in house, 20 May 1970; Female, 8.5mm, in woods on ground, 26 April 1970; det. WJG.

**Schizocosa* sp., likely new species related to *arenata* Hentz: Male; Female, 9mm, on ground near trees, 29 April 1970; det. WJG.

**Schizocosa* sp., near *ocreata* Hentz: Male, 5mm; Female, 6mm, in woods, 29 April 1970; det. WJG.

**Trochosa* sp., near *sepulcharis* Montgomery: Imm., 7mm, on ground, 1 May 1970, det. WJG.

Mimetidae

**Mimetus interfector* Hentz: Male, 4mm, under eaves of house, 28 April 1970; Female, 4.5mm, in S in garage, 25 July, 1970, det. WJG.

Oecobiidae

Oecobius annulipes Lucas (= *O. parietalis* Hentz): Female, 2.5mm, in house along window sill, 5 December 1970; det. WJG.

Oonopidae

**Orchestina saltitans* Banks: Male, 1mm, in house hanging by drag line, 12 July 1970; det. WJG; Male, < 1.0mm, on bedspread in house, 17 July 1970; det. BV.

Oxyopidae

Oxyopes salticus Hentz: Female, 9mm, in S in garage, 5 August 1970; Imm. Female, 5mm, in bush near house, 24 May 1970; Imm. Female, 4mm, on folded sail of boat, 30 May 1970; det. WJG.

Oxyopes scalaris Hentz: Male, 5mm; Females, 7mm, 6.5mm, 6mm, 6mm, in S in garage, 16 August 1970; Female, 10mm, in S in garage, 3 July 1970; Female, 7mm, in S in garage, 25 July 1970; det. WJG.

Peucetia viriadans (Hentz): Male, in S under bridge, 8 July 1970; Female, 15mm, with egg sac in pine tree, September 1968; Imms, and Females, in S in garage, 25 July 1970; Imms. and Females in S in garage, 5 August 1970; Imm., 3.5mm, in web strands in tree, 9 May 1970; det. WJG, KMB.

Pholcidae

**Smeringopus elongatus* (Vinson): Imm. Female, 5mm, in warehouse, Center, Texas, 20 May 1970; det. WJG. [Introduced from Cuba or West Indies. Tropicopolitan. First U.S. record.]

Pisauridae

Dolomedes sexpunctatus Hentz: Female, 18mm, on ground in woods, 27 September 1970; det. WJG.

**Dolomedes tenebrosus* Hentz: Male, 9mm, at water edge, 2 April 1970; det. WJG, BV.

**Pisaurina mira* (Walckenaer): Male, 12mm, running on ground 14 mi. N Nacogdoches, Texas, 23 April 1970; det. WJG.

Salticidae

Agassa cyanea (Hentz): Female, 4mm, in S under bridge, 8 July 1970; det. WJG.

**Consingis* [=Peckhamia] *americanus* (Peckham and Peckham): Male, 3.5mm, in Pioneer Park, Nacogdoches, 27 April 1970; Male, 3.5mm, on car, 28 April 1970; Female, 4mm, in SFASU Microbiology Lab, 3 July, 1970; det. WJG, BV.

**Eris chrysis* (Walckenaer) [=Paraphidippus marginatus]: Female, 8mm, in S in garage, 3 July 1970; Female, 12mm, in S in garage, 25 July 1970; det. WJG.

Eris [=Paraphidippus] *marginatus* (Walckenaer); Male, 5mm, on car window, 13 May 1970; det. WJG.

**Eris pineus* (Kaston): Male, 6mm; Imm. Male, 4.3mm, in S in garage, 25 July 1970; Males, 5.25mm, 5.75mm; Female, 5mm, in S in garage, 20 July 1970; Imm., 3.9mm, in S in garage, 25 July 1970; det. WJG.

Habrocestum pulex (Hentz): Male, 2.9mm; Female, 3.9mm, on side of house, 20 May 1970; det. WJG.

**Hasarius adansonii* (Audouin): Female, 5mm, in culvert, 8 May 1970; Female, 5mm, on fence, October 1970; det. WJG, KMB.

**Hentzia mitrata* (Hentz): Male, 3.8mm, running on kitchen floor, 24 July 1970; Male, 3.75mm, in S in garage, 5 August 1970; det. WJG, BV.

**Hentzia palmarum* (Hentz): Imm., 2.25mm, on clothes line, 12 July 1970; det. WJG.

Marpissa (=Hycitia) *bina* (Hentz): Male, 8mm, on table on boat pier, Lake Striker, near Rusk, Texas, 30 May 1970; det. WJG.

Marpissa (=Hycitia) *pikei* (Peckham and Peckham); Female, 6mm, in S in garage, 5 August 1970; det. WJG.

Metacyrba taeniola (Hentz): Male, 5mm, on window screen, 27 May 1970; Female, 5mm, on table on patio, 27 May 1970; Female, 4mm, in house, 27 June 1970; det. WJG.

Metacyrba undata (DeGeer): Female, 10.5mm, on ground in woods, 27 April 1970; Female, 8mm, on bedroom rug 6 May 1970; det. WJG.

**Metaphidippus galathea* (Walckenaer): Males, 3mm, 3.5mm, 4mm, in S in abandoned shack, 27 June 1970; Male, 4.5mm, on thistle plant, 3 May 1970; Females, in S under bridge, 8 August 1970; Imm., 3mm, on sheet on clothes line, 8 August 1970; det. WJG, BV.

**Metaphidippus protervus* (Walckenaer) [=M. capitatus]: Female, 4mm, in S in garage; det. WJG.

Pellenes sp.: Female, 6.5mm, in SC in abandoned shack, 27 June 1970; Female, 8mm, in S in garage, 5 August 1970; det. WJG.

Pellenes (*Habronattus*) sp.: Female, 3.5mm, on boat pier at Lake Striker, near Rusk, Texas, 30 May 1970; det. WJG.

Pellenes (*Habronattus*) *coronatus* (Hentz): Male, 4mm, in T in garage, 19 August 1970; det. BV.

Pellenes (*Pellenes*) *limatus* (Peckham): Female, 3mm, in S under bridge, 8 August 1970; det. BV.

Phidippus audax (Hentz) [=P. variegatus Lucas]: Male, 10.5mm, on plants, 25 March 1970; Female, 10.5mm, on orange tree in Manuel, Brazoria County, Texas, June 1970; Female, 17.5mm, in bushes, April 1970; Imm., 4.5mm, in S in garage, 5 August 1970; Imm., 3.5mm, in S in abandoned shack, 19 August 1970; det. WJG.

Phidippus cardinalis (Hentz): Male, 7mm, on fence, October 1968; Imm. Female, 9mm, running on open ground in woods, 30 August 1970; det. WJG.

Phidippus sp., probably *carolinensis* Peckham and Peckham: Male, 6.5mm; Female, 11mm, in S in garage, 30 June 1970; det. WJG.

**Phidippus clarus* Keyserling: Imm., 10mm, in S under bridge, 8 July 1970; Imms., 12mm, 10mm, in S in abandoned shack, 19 August 1970; det. WJG.

Phidippus sp., probably *P. mccooki* (Peckham): Imm., 4.5mm, on clothes line, June 1970; Imm., 4.5mm, in S in abandoned shack, 27 June 1970; Imm., 4.5mm, in S under bridge, 8 July 1970; det. WJG, KMB.

Phidippus sp., probably *mystaceus* (Hentz): Imms., 5mm, 5mm, 6mm, in S in garage, 30 June 1970; det. WJG.

**Phidippus* sp., near *whitmani* Peckham and Peckham; Female, 11mm, in S under bridge, 1970; det. WJG.

**Sarinda hentzi* (Banks) [= *Myrmarachne albocinctus*]: Male, 3.5mm, on patio in afternoon, 26 April 1970; Male, 3.5mm, at house, 8 May 1970; det. WJG.

Thiodina puerpera (Hentz): Male, 5.5mm, in S in garage, 16 August 1970; Female, 5.5mm, in S under bridge, 8 July 1970; Imm. Female, 5.5mm, in S in garage, 5 August 1970; Imm., in S under house eaves, 27 June 1970; det. WJG.

Zygoballus bettini Peckham: Female, 3mm, in SC in abandoned shack, 27 June 1970; det. WJG.

Zygoballus sexpunctatus (Hentz): Male, 3mm, in SC in abandoned shack, 27 June 1970; Females, 3.5mm, 3.5mm, 3mm, in T under eaves of house, 27 June 1970; Female, 3.5mm, in S under bridge, 8 July 1970; det. WJG, BV.

Scytodidae

Scytodes sp.: Males and Females, on houses and in garages and storerooms, occasionally in S; throughout year; Female, 9mm, on house, 29 March 1970; Female, 9mm, on window screen at night, 11 September 1970; det. WJG, KMB. [For over 20 years this has gone under the name of *S. intricata* Banks, but it is an undescribed species.]

Segestriidae

Ariadna bicolor (Hentz): Female, 9mm, under bark of pine tree at end of sheet-like web, 21 September 1970; det. WJG.

Tetragnathidae

Tetragnatha elongata Walckenaer: Imm. Male, 10.9mm, in web in grass by creek, 10 September 1968; det. WJG.

**Tetragnatha seneca* Seeley: Males, 9.5mm, 8.5mm; Females 10.9mm, 8mm (after making egg sac), in webs by Lake Rayburn, Texas, 23 August 1970; det. WJG.

Theraphosidae

Dugesia hentzi Girard: Male, 35mm; Female, 42mm, between Etoile and Nacogdoches, Texas, 20 June 1970; Male, 34mm, in service station, June 1970; det. WJG.

Theridiidae

Achaearenea porteri (Banks): Female, 3.4mm, in S in garage, 25 July 1970; det. WJG.

Achaearenea tepidariorum (Koch): Males, 4.5mm, 4mm, 2.5mm, 2mm; Females, 8mm, 7mm, 6mm, 4mm, on window screens, webs in storage areas, in S and SC through-

out year; det. WJG, BV.

Latrodectus mactans (Fabricius): Penultimate Male, 3.5mm, in SC in garage, 25 July 1970; Female, 14mm, in warehouse, Center, Texas, 12 September 1970; under stones, under porch, roofs, in storerooms, throughout year; det. WJG.

Steatoda americana (Emerton): Female, 2.5mm, in S in garage, 25 July 1970; det. WJG.

Steatoda quadrimaculata (O.P. Cambridge): Male, 2.5mm, running on patio, 22 August 1970; Male, 2mm, on dirt, 28 August 1970; Females, 3.5mm, 3.25mm, 3mm, in SC under house rafters, 19 July 1970; Females, 3.5mm, 4mm, in S in garage, 25 July 1970; Imm., 1mm, on house, 19 July 1970; Imm., 2.5mm, in S in garage, 25 July 1970; det. WJG.

Steatoda triangulosa (Walckenaer): Male, 3.5mm; Female, 4mm, in S in garage, 5 August 1970; Female, 5mm, behind old boards in warehouse, Center, Texas, 24 May 1970; Female, 4mm, in culvert, 12 May 1970; Female, 6mm, under wooden bridge, 5 August 1970; Imm., 2.3mm, on house by door, 28 April 1970; det. WJG.

Theridion australe Banks: Female, 2.5mm, in S under house rafters; Female, 3mm, in SC under house rafters, 19 July 1970; det. WJG, BV.

Theridion sp. (possibly *differens* Emerton): Imm., 2mm, in latch of screen door under house, Austin, Texas, 17 June 1970; det. WJG.

Theridion flavonotatum Becker: Female, 1.75mm, in web in abandoned shack, 27 June 1970; det. WJG.

Tidarren sisypoides (Walckenaer) (= *T. fordum* Keyserling): Female, 6.5mm, by door outside, 12 May 1970; Female, 6mm, in curled leaf with egg sac under covered bridge over creek, 26 September 1970; det. WJG.

Thomisidae

Misumema vatia Clerck: Female, 5mm, in S in garage, 30 June 1970; Imms., 5.25mm, 4.8mm, in S on house, 30 June 1970; det. WJG, BV.

Misumenops celer (Hentz): Male, 2.5mm, on lawn mower, 27 June 1970; Female, 6mm, on thistle plant, 7 May 1970; Males, 3mm, 3mm; Imm. Female, 4.25mm, in S in garage, 5 August 1970; det. WJG.

Misumenops oblongus (Keyserling): Imm., 3mm, on ground under clothesline, 13 June 1970; Imms., 3mm, 2mm, in S on house, 27 June 1970; det. WJG.

Philodromus sp. No. 1: Imm., 1.25mm, on garage ceiling by light at night, 18 June 1970; Imm., 4.5mm, in S in garage, 5 August 1970; det. WJG.

Philodromus sp. No. 2: Female, 5.5mm; Imm., 5.5mm, in S in garage, 5 August 1970; det. WJG.

Philodromus keyserlingi Marx: Female, 6mm, in S. in garage, 25 July 1970; det. BV.

**Thanatus vulgaris* Simon [= *T. peninsulanus* Banks]: Female, 7.5mm, in warehouse, Center, Texas 24 May 1970; det. WJG.

Tmarus angulatus (Walckenaer): Female, 7.5mm, in S in abandoned shack, 19 August 1970; det. WJG.

Tmarus floridensis Keyserling: Female, 7mm, in SC in garage; 30 June 1971; det. WJG.

Xysticus auctificus Keyserling: Male, 4.5mm, in S in garage, 16 August 1970; det. BV.

Xysticus sp., probably *ferox* (Hentz): Imm., 3.5mm, in SC in abandoned shack, 27 June 1970; det. WJG.

**Xysticus formosus* Banks: Female, 9mm, falling from tree, 8 May 1970; det. WJG.

Xysticus funestus Keyserling: Female, 8mm, on SFASU Clinic floor, 22 November 1968; det. WJG.

Xysticus texanus Banks: Male, 5.5mm, on house, 23 August 1970; Penultimate Male, 3.5mm, in S in abandoned shack, 27 June 1970; det. WJG, BV.

Uloboridae

**Uloborus* sp., probably *cinereus* O.P. Cambridge: Female, 3.5mm, in small orb web between bushes, 12 May 1970; det. WJG.

Uloborus glomosus (Walckenaer): Females, 4mm, 4mm, in webs near creek, 8 July 1970; det. WJG.

Table 1.—Spiders of Nacogdoches, Texas. A listing of represented families by numbers of genera and species in each.

FAMILY	GENERA	SPECIES
Agelenidae	2	3
Amaurobiidae	1	1
Anyphaenidae	1	1
Araneidae	20	29
Clubionidae	6	7
Ctenizidae	1	1
Filistatidae	2	2
Gnaphosidae	6	9
Linyphiidae	7	10
Loxoscelidae	1	1
Lycosidae	5	12
Mimetidae	1	1
Oecobidae	1	1
Oonopidae	1	1
Oxyopidae	2	3
Pholcidae	1	1
Pisauridae	2	3
Salticidae	14	30
Scytodidae	1	1
Segestriidae	1	1
Tetragnathidae	1	2
Theraphosidae	1	1
Theridiidae	5	10
Thomisidae	6	14
Uloboridae	1	2

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