## NEW RECORDS OF ADULT UDONATA FROM ALABAMA, UNITED STATES, IN THE FLORIDA STATE COLLECTION OF ARTHROPODS\*

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Abstract — First published records are given for 30 spp. from the State of Alabama, United

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Introduction

While preparing specimens of adult Odonata from the Smith-Rodges Collection for inclusion in the Florida State Collection of Arthropods (FSCA), we encountered many species for which there are no published records for the State of Alabama (AL), United States. A search

of the entire FSCA and of the literature for species collected in AL resulted in a list of 156 species, among which 30 (24 Zygoptera, 6 Anisoptera), hitherto unreported for AL, are recorded in this paper. Any mention of AL, including theses, map locations only, and State only records are considered to be published records, and no species so listed in the literature is treated as new in this paper. Most of the new records are the result of intensive collecting by Drs Septima Smith, R.S. Hodges, and their associates, notably a group of avid collectors who designated themselves "The Dragonets". We salute and extend appreciation to these zealous odonatologists whose specimens provided many Anisoptera records for the NEEDHAM & WESTFALL Manual (1955) and Zygoptera records for the 1970 unpublished communication of M.J. Westfall. Beyong these dates, additions to the AL list have been made by: JOHNSON (1972, 1973a, 1973b, 1974), **BICK (1978), TENNESSEN (1979), CARLE** (1979, 1980, 1981), DUNKLE & WESTFALL (1982), and LOUTON (1982).

Because many of the new records are of widespread and abundant species and because all specimens are in the FSCA where traditional collection data are readily available, only counties and total number of specimens are listed for each species in this paper. Remarks are given only when the record provides a range limit or a range extension. The United States Post Office two-letter abbreviations are used for the states, and the sequence of families, genera, and species follows that of the FSCA.

## List of species

Coenagrionidae (22). — Argia moesta (Hagen), 48\$, 38\$\times\$, 3 pairs: Choctaw, Colbert, Covington, Dale, Dallas, DeKalb, Escambia, Franklin, Geneva, Jackson, Lauderdale, Lee, Mobile, Tuscaloosa. A. sedula (Hagen), 126\$, 30\$\times\$, 2 pairs: Bibb, Calhoun, Clarke, Colbert, Covington, Dallas, Geneva, Henry, Houston, Tuscaloosa. A. translata (Hagen), 58\$\times\$, 29\$\times\$, 3 pairs: Bibb, Calhoun, DeKalb, Houston, Jackson, Lauderdale, Marshall, Tuscaloosa. Chromagrion conditum (Hagen), 3\$\times\$: Hale, Tuscaloosa. Enallagma aspersum (Hagen), 20\$\times\$: Madison, Tuscaloosa. E. basidens Calvert, 20\$\times\$, 7\$\times\$, 2 pairs: Calhoun, Marshall, Tuscaloosa. E. cardenium Selys, 2\$\times\$: Geneva. This species,

previously recorded only from FL, is now reported very slightly northward in southernmost AL. E. civile (Hagen), 58&, 1Q, 2 pairs: Calhoun, Chambers, Choctaw, Houston, Mobile, Talladega, Taylor, Tuscaloosa, Washington. E. consisum Williamson, 23: Mobile. E. daeckii (Calvert), 323, 82: Baldwin, Covington, Mobile, Tuscaloosa. E. davisi. Westfall, 23, 12: Mobile. This seems to be the southwesternmost record for this Coastal Plain species. E. doubledayi Selys, 55&, 2Q: Covington, Dale, Geneva, Houston, Madison, Mobile, Tuscaloosa. E. dubium Root, 23: Houston, Mobile. E. durum (Hagen, 13: Mobile. E. exsulans (Hagen), 973, 152, 4 pairs: Bibb, Dallas, DeKalb, Jackson, Lauderdale, St. Clair, Tuscaloosa. E. pallidum Root, 13, 19: Baldwin. E. sulcatum Williamson, 23, 32: Covington. Ischnura prognatha (Hagen), 12: Madison. I. ramburii (Selys), 253, 102: Choctaw, Clarke, Conecuh, Covington, Dale, Geneva, Greene, Henry, Mobile, Tuscaloosa, Washington. I. verticalis (Say), 13: DeKalb. Nehalennia gracilis Morse, 23, 19: Covington. This record and those of JOHNSON & WESTFALL (1970) from FL show that the species extends further south than WALKER's (1953) southern limit of NJ to MO. N. integricollis Calvert, 17, 15: Baldwin, Covington, Geneva, Houston, Mobile, Tuscaloosa, Washington.

Lestidae (2). — Lestes forcipatus Rambur, 253, 89: Madison. This seems to be the southernmost record for this species, widespread in northern U.S. L. inaequalis Walsh, 13: Greene-Hale County line.

Aeshnidae (1). — Gomphaeschna antilope (Hagen), 13, 12: Mobile, Tuscaloosa.

Gomphidae (3). — Gomphus (Gomphurus) hybridus Williamson, 43, 42: Greene-Sumter County line, Tuscaloosa. G. (Hylogomphus) parvidens Currie, 13, 12: Perry. NEEDHAM & WESTFALL (1955) listed this species from AL, but CARLE (1979) considered AL specimens to be G. apomyius Donnelly. However, specimens in the FSCA collected in Perry County, AL, by Dr. S. Dunkle are indeed G. parvidens as are a 3 and a Q in our own collection from Hale County. These records extend the range southwestward beyong its previously recorded narrow limits in the southern Appalachian Mountains. Progom-

phus bellei Knopf & Tennessen, 13: Henry. This southeastern AL locality is very slightly north of the FL Panhandle counties recorded in the original (1980) description.

Corduliidae (2). — Tetragoneuria sepia Gloyd, 1Q: Perry. This species has been recorded previously only from FL. However, specimens in the FSCA show that it is more widespread, occurring in central AL and in southeastern GA. T. spinosa (Hagen), 223, 2Q: Tuscaloosa. This seems to be the westernmost record because our (1957) report from OK, based on a specimen no longer available, undoubtedly is erroneous.

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