

DRAGONFLY RECORDS FROM HIGHLANDS COUNTY, FLORIDA, UNITED STATES

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Abstract – 38 spp., collected by the author during July 6-31, 1977, are brought on record. Special attention is paid to *Idiataphe cubensis* (Scudd.), which is new to the county. In addition, the abolishment of the generic name *Erythemis* Hag. in favour of *Lepthemis* Hag. is briefly discussed.

Introduction

This report is based on material collected in Highlands County, Florida, during my stay as guest investigator at the Archbold Biological Station of the American Museum of Natural History, New York, July 6-31, 1977.

The odonate fauna of Highlands County is of interest, since this county belongs to the "boundary counties", which lie between the more or less tropical southern part and the subtropical northern part of the peninsula. One species, *Idiataphe cubensis* (Scudd.), previously known only from the extreme southern tip of Florida (Broward, Dade and Monroe Counties), now appears in Highlands County as well. This record may point to a continuation of the process of expansion of its range in the peninsula.

Localities visited

In order to present the data as concisely as possible, numbers, quoted between brackets, are assigned to the localities.

Dr. James N. Layne, Executive Director

of the Archbold Biological Station (1) suggested a number of localities, where I found ideal collecting conditions. These places are the following: northern shore of Lake Annie (2); – Fisheating Creek at Fla 70 (3); – Fisheating Creek at Fla 731 (4); – Arbuckle Creek at U.S. 98 (5); – Istokpoga Creek at Fla 621 (6); – canal at Fla 621 (7); – shore of Lake Istokpoga near this canal (8); – and Kissimmee River at U.S. 98 (9). On the recommendation of Dr. J.N. Layne I obtained a permit from the Florida Department of Natural Resources for collecting at the Highlands Hammock State Park (10).

Conspectus of material collected

Genera and (sub)species are listed in alphabetic sequence.

Coenagrionidae: *Argia fumipennis atra* Gloyd: 2, 3, 4, 5, 8, 10; – *A. sedula* (Hag.): 1, 3, 4; – *Enallagma durum* Hag.: 8; – *E. sulcatum* Will.: 2; – *Ischnura posita* (Hag.): 4, 10; – *I. ramburi* Sel.: 2, 3, 4, 5, 8, 10; – *Telebasis byersi* Westf.: 3, 10.

Calopterygidae: *Calopteryx maculata* (P. de B.): 10.

Gomphidae: *Aphylla williamsoni* (Gloyd): 3, 4, 5, 6, 7, 8, 9; – *Gomphus pallidus* Ramb.: 4; – *G. dilatatus* Ramb.: 5; – *G. plagiatus* Sel.: 7, 8; – *Progomphus alachuensis* Byers: 2.

Aeshnidae: *Anax junius* (Drury) 3, 7, 8; – *Coryphaeschna ingens* (Ramb.):

1, 2, 3, 4, 5, 6, 7, 8, 10; - *Gynacantha nervosa* Ramb.: 1; - *Nasiaeschna pentacantha* (Ramb.): 4, 5, 10.

Macromiidae: *Macromia taeniolata* Ramb.: 4, 5, 7, 8, 9.

Corduliidae: *Epithea princeps regina* (Sel.): 1, 4, 7, 8, 10.

Libellulidae: *Brachymesia gravida* Calv.: 3, 5, 6, 7, 9, 10; - *Celithemis berthia* Will.: 1, 2, 8; - *C. eponina* (Drury): 1, 2, 3, 5, 7, 8, 9; - *C. fasciata* Kirby: 2; - *Erythrodiplax connata minuscula* (Ramb.): 1, 10; - *Idiataphe cubensis* (Scudd.): 2; - *Leptemis simplicicollis* (Say): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10; - *Libellula auripennis* Burm.: 2; - *L. axilena* Westw.: 1, 2, 10; - *L. incesta* Hag.: 1, 2, 4, 5, 6, 7, 9, 10; - *L. needhami* Westf.: 2, 3; - *L. vibrans* Fabr.: 10; - *Miathyria marcella* Sel.: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10; - *Orthemis ferruginea* (Fabr.): 1, 3, 5, 7; - *Pachydiplax longipennis* (Burm.): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10; - *Pantala flavescens* (Fabr.): 1, 2, 3, 5, 6, 7, 8; - *Perithemis tenera* (Say): 3, 4, 5, 6, 7, 9, 10; - *Tramea carolina* (L.): 1, 2, 3, 5, 6, 7, 8, 9, 10; - *T. lacerata* Hag.: 3.

Additional records

For additional records reference is made to PAULSON (1966). Besides the species collected by myself and listed above (except *Idiataphe cubensis*), the following Anisoptera were placed by him on record for Highlands County: Gomphidae: *Gomphus australis* Needh., *G. cavillaris* Needh., *G. minutus* Ramb., *Hagenius brevistylus* Sel.; Aeshnidae: *Anax longipes* (Hag.), *Epiaeschna heros* (Fabr.), *Gomphaeschna antilope* (Hag.), *Triacanthagyna trifida* (Ramb.); Macromiidae: *Didymops floridensis* Davis, *Macromia georgina* Sel.; Corduliidae: *Neorocordulia alabamensis* Hodges, *Somatochlora filosa* (Hag.), *Tetragoneuria cynosura* Say, *T. sepia* Gloyd, *T. stella* Will.; Libellu-

lidae: *Celithemis amanda* (Hag., *C. ornata* (Ramb.), *Erythrodiplax berenice* (Drury), *Ladona deplanata* Ramb., *Pantala hymenaea* (Say). The addition of *Idiataphe cubensis* new to the county brings the number of anisopteran species known from Highlands County to 50.

It is not clear which Zygoptera occur in Highlands County. PAULSON (1966) recorded 29 Zygoptera for the southern tip of Florida (south of Highlands County). In the collection of the Archbold Biological Station there are 15 zygopteran species from Highlands County of which the following ones were not collected in that county by me: Coenagrionidae: *Anomalagrion hastatum* (Say), *Argia moesta* (Hag.), *Enallagma cardenium* Sel., *E. doubledayi* Sel., *E. polutum* (Hag.), *Ischnura prognatha* (Hag.); Lestidae: *Lestes vigilax* Hag.; Hetaeriniidae: *Hetaerina titia* (Drury); Calopterygidae: *Calopteryx dimidiata* (Burm.).

A note on the generic names *Erythemis* and *Leptemis*

The discard of the generic name *Erythemis* Hagen in favour of *Leptemis* Hagen is not satisfying in all respects. The species *simplicicollis* (Say), *vesiculosa* (Fabr.), *plebeja* (Burm.), and *haematogastra* (Burm.), differ greatly from such species as *peruviana* (Ramb.) and *mithroides* Brauer in the slenderness of the abdomen and the conformation of the basal segments of the male abdomen. In this respect they approach, however, such species as *credula* (Hag.) and *attala* (Sel.).

Reference - PAULSON, D.R., 1966. *The dragonflies (Odonata: Anisoptera) of southern Florida*. Thesis. Univ. Miami, Coral Gables.

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