

ODONATA COLLECTED IN NICARAGUA

NICARAGUA EXPEDITION 2001*

Abstract — During 29 July through 3 Aug. 2001, 71 spp. were collected and 4 additional spp. were positively identified, from 12 localities in Jinotega and Matagalpa Departments. 25 spp. are new

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records for Nicaragua, raising the total number of spp. for this country to 124.

Introduction

Nicaragua has one of the most poorly known Odonata faunas of Central America. PAULSON (1982) listed 51 species for this country and a few years later MAES et al. (1988) increased this number to 90. Recently the same authors raised this number to 98 species (MAES et al., 2001, in litt.). Additionally T. Donnelly identified a photograph of a hand-held specimen of *Coryphaeschna apeora* Paulson from a photograph taken in Managua Department.

We visited Nicaragua for a week's collecting trip at the end of July and beginning of August, 2001. The collections were centered around Cerro Kilambé and Wiwilí, Jinotega Department and Selva Negra, Matagalpa, Department, respectively. We obtained a total of 67 species belonging to 37 genera and 9 families. We also positively identified by sight four more species, totalling 71 species collected or sighted during the trip.

We report 25 new records for the country, increasing the total number of species for this country to 124 (one unnamed). Species new to the country are noted as (NR).

Localities and records

(1) CERRO KILAMBE and immediate vicinity (1000-1250 m; 29-31 July, 2001). — Odonata were collected along small streams, one of which was in primary forest at 1250 m elevation. The weather was generally sunny, but with several rain squalls. This was the locality for *Hetaerina sempronia*, *Heteragrion eboratum*, *Argia medullaris*, *Epigomphus westfalli*, and the undescribed *Paraphlebia*. The *Mecistogaster* and *Megaloprepus* were taken along paths in the forest. The undescribed *Paraphlebia* is the same species that Donnelly collected in 1974 in Matagalpa Department at lower elevation and about 90 km south. The remaining stream localities were in disturbed forest adjacent to small farms. The record of *Heteragrion eboratum* extends its range about 300 km SE.

Hetaerina capitalis Selys, *H. cruentata* (Rambur), *H. sempronia* Hagen (NR), *Archilestes grandis* (Rambur), *Heteragrion albifrons* Ris, *H. eboratum* Donnelly (NR), *Paraphlebia* undescribed

species (NR), *Mecistogaster modesta* Selys (NR), *Megaloprepus caerulatus* (Drury), *Anisagrion allopterum* Selys, *Argia* sp. nr *extranea* Hagen, *A. medullaris* Hagen in Selys (NR), *Epigomphus westfalli* Donnelly, *Brechmorhoga pertinax* (Hagen), *B. rapax* Calvert, *L. croceipennis* Selys (sight), *Paltothemis lineatipes* Karsch (sight), *Pantala hymenaea* (Say), *Uracis imbuta* (Burmeister).

Localities (all Nicaragua, Jinotega Dept): small stream, 13°35.50'N, 85°44.55'W; 1000 m; small forest stream at camp, 13°35.2'N, 85°42.6'W, 1250 m; in forest, near base camp, ca 13°35'N, 85°42'W, 1250 m; stream at farm, 13°35.6'N, 85°42.6'W 1100 m.

(2) VICINITY OF WIWILÍ, along road S to Jinotega, small streams between 2 and 9 km S of village (all approx. 500 m; 1 Aug. 2001). — Odonata were collected along very small streams in the immediate vicinity of the dirt road, which was in agricultural country with small patches of remnant forest. The weather was sunny. The two species of *Orthemis* were flying together at a ford crossing the road. *O. discolor* was distinctly more red than *ferruginea* in this instance.

Hetaerina cruentata (Rambur), *H. occisa* (Selys), *H. miniata* Selys (NR), *H. sempronia* Hagen, *Lestes tikalus* Kormondy (NR), *Heteragrion erythrogastrum* Selys (NR), *Palaemnema nathalia* Selys (NR), *Megaloprepus caerulatus* (sight), *Acanthagrion quadratum* Selys, *Anisagrion allopterum* Selys, *Argia anceps* Garrison, *A. oculata* Hagen in Selys, *A. oenea* Hagen in Selys, *A. pulla* Hagen, *A. translata* Hagen in Selys, *A. ulmea* Calvert, *Enallagma novaehispaniae* Calvert, *Telebasis salva* (Hagen) (NR), *Brechmorhoga pertinax* (Hagen), *B. praecox* (Hagen), *B. vivax* Calvert, *Dythemis sterilis* Hagen, *Macrothemis inacuta* Calvert, *M. pseudimitans* Calvert, *Orthemis discolor* (Burmeister) (NR), *O. ferruginea* (Fabr.), *Perithemis mooma* Kirby, *Pseudoleon superbus* (Hagen).

Localities (all Nicaragua, Jinotega Dept and about 500 m elevation): ford on road, 2 km S Wiwilí, 13°35.52'N, 85°48.52'W; stream along road, 5 km S Wiwilí, 13°33.84'N, 85°47.54'W; stream along road, 6 km S Wiwilí, 13°31.64'N, 85°46.48'W.

(3) POND ALONG ROAD NEAR WIWILÍ (elevation about 500 m; 1 Aug. 2001). — Collecting

was done around a heavily vegetated (*Pistia stratiotes* "lechuguilla"), shallow pond about 30 m in diameter. In addition to the species listed, a *Coryphaeschna* (probably *adnexa*) was observed repeatedly but not netted.

Lestes tenuatus Rambur (NR), *L. tikalus* Kormondy, *Acanthagrion quadratum* Selys, *Ischnura capreolus* Hagen, *Telebasis filiola* (Perty) (NR), *T. griffinii* (Martin) (NR), *T. isthmica* Calvert (NR), *T. salva* (Hagen), *Brachymesia herbida* (Gundlach), *Erythemis mithroides* (Brauer), *Erythrodiplax umbrata* (L.), *E. funerea* (Carpenter), *Miathyria marcella* (Selys), *Micrathyria hagenii* Kirby (NR), *M. ocellata* Martin, *Orthemis discolor* (Burmeister), *Perithemis mooma* Kirby, *Tramea abdominalis* (Rambur) (NR).

Locality: pond 2.5 km S Wiwilí, 13°35.00'N, 85°48.17'W.

(4) ALONG ROAD BETWEEN WIWILÍ AND MATAGALPA (various elevations; 2 Aug. 2001).

— We stopped briefly at three places along the road from Wiwilí and Hotel Selva Negra. Collecting at the first locality was terminated by a rain shower, but was sunny for the remainder of the drive. The *Phyllogomphoides duodentatus* record extends the range of this species about 400 km to the SE.

Hetaerina cruentata (Rambur) (c), *Archilestes latialatus* Donnelly (a) (sight), *Acanthagrion quadratum* Selys (c), *Anisagrion allopteron* (a), *Argia* sp. nr *extranea* Hagen (c), *A. oculata* Hagen in Selys (c), *A. oenea* Hagen in Selys, *A. pulla* Hagen in Selys(c), *A. translata* Hagen in Selys (c), *Enallagma novaehispaniae* Calvert (c), *Phyllogomphoides duodentatus* Donnelly (c), *Brechmorhoga pertinax* (Hagen) (c), *Erythrodiplax fusca* (Rambur) (b,c), *Miathyria marcella* (b).

Localities (all Nicaragua, Jinotega Dept, elevations not recorded): (a) 38.5 km S Wiwilí, small mountain stream, 13°29.25'N, 85°93.82'W; (b) Reservoir 42.6 km S Wiwilí, Reservoir, 2 Aug. 2001, 13°24.28'N, 85°90.35'W; (c) 53.2 km S of Wiwilí, shallow river, 13°15.21'N, 85°92.83'W.

(5) HOTEL SELVA NEGRA, NEAR MATAGALPA (1000 m elevation; 3 Aug. 2001).

— The hotel is a resort on a forested mountain. Collecting was done mainly on small, rocky streams in the forest, on the main pond by the hotel building, and on a smaller pond below the main pond. The weather was sunny.

Hetaerina capitalis Selys, *H. cruentata*

(Rambur), *H. occisa* Hagen, *Heteragrion albifrons* Ris, *Megaloprepus caeruleus* (Drury), *Anisagrion allopteron* Selys, *Argia chelata* Calvert, *Argia* sp. nr *extranea* Hagen, *A. medullaris* Selys, *Enallagma civile* Hagen, *Ischnura ramburii* (Selys), *Neoerythromma cultellatum* (Selys), *Aeshna cornigera* (Brauer), *A. jalapensis* Williamson, *A. psilus* Calvert (NR), *Remartinia luteipennis* (Burmeister) (NR), *Epigomphus westfalli* Donnelly, *Brechmorhoga pertinax* (Hagen), *B. rapax* Calvert, *B. vivax* Calvert, *Cannaphila vibex* (Hagen), *Libellula foliata* (Kirby) (NR), *L. herculea* Karsch (sight) (NR), *Micrathyria* sp. nr *laevigata* Calvert (NR), *Orthemis discolor* (Burmeister), *Perithemis mooma* Kirby, *Sympetrum illotum* (Hagen) (NR).

Locality: Hotel Selva Negra, 13°00.0'N, 85°54.5'W

Discussion

We consider the present total of 125 species for Nicaragua to be low. The Odonata diversities in Costa Rica and Honduras have been estimated around 268 species (RAMÍREZ et al., 2000) and 165 species, respectively (DUNKLE, 1988) [and unpublished additions by T.W. Donnelly, 1999]. Of the Odonata collected in 2001, three species have their southeastermost limit in Nicaragua viz., *Paraphlebia* sp. n., *H. eboratum* and *Phyllogomphoides duodentatus*. The discovery of *Paraphlebia* is significant because it represents the southernmost limit of this genus. *Heteragrion eboratum* was originally described with Guatemalan material (DONNELLY, 1965), and has been found also in nearby Honduras and El Salvador; the Nicaraguan record represents the southeastermost record for this species in Central America. *Epigomphus westfalli*, now known from three widely separated localities, remains the only species in this genus known from Nicaragua.

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