

## BRIEF NOTE

# Odonata of the Beaver Creek Wetlands, Greene County, Ohio: A Preliminary Survey<sup>1</sup>

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**ABSTRACT:** Weekly trips were made to various habitats within the Beaver Creek Wetlands in Greene County, OH, from 15 April to 3 October in 1996 and 20 April to 18 October in 1997. Specimens were collected with aerial nets or recorded as observational records. A species list for the wetlands was built and data was entered into the Ohio Odonate Survey database. Thirty-six species (22 Anisoptera; 15 Zygoptera) were collected including 11 new county records bringing the Greene county list from 43 to 54.

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## INTRODUCTION

Although there have been a number of published distributional records for Odonata in Ohio (Borror 1937; Alrutz 1959, 1961, 1992, 1993), none have covered Greene County extensively. Prior to this study, the Ohio Odonate Survey's database for this area contained records for only 43 species. The Beaver Creek Wetlands, located in Greene County, are a patchwork of groundwater-influenced wetlands found along the Big Beaver Creek. These wetlands contain a variety of habitats including ponds, streams, marshes, wet meadows and fens. Wetland restoration efforts currently underway in the region make this study potentially valuable to assess the effects of the restorations on odonate habitat. We had two objectives:

- The establishment of base-line data for future studies of odonates in this region.
- To contribute to the survey efforts of the Ohio Odonate Survey by building the Greene County species list.

## MATERIALS AND METHODS

We made weekly trips between 15 April and 3 October in 1996 and 20 April and 18 October in 1997 to collect with aerial nets. To obtain activity dates for each species, specimens were collected, their identities were confirmed in the field and then released. A review of the Wright State University student insect collection (made between the years 1968 and 1979) was also included. Collection sites were chosen to include all of the major areas in the Beaver Creek Wetlands. The sites were: The Beaver Creek Wetlands Wildlife Area (BWWA), New Germany Trebein Road (39°44.31 N, 84°00.71 W) which included alkaline sedge meadows, restored fens and a vernal pond; the old American Legion (OAL) restored marsh site, New Germany Trebein Road (39°46.04 N, 84°00.49 W) which had an expanse of standing water dominated by cattails and a wet meadow; The Siebenthaler Fen Boardwalk Area (SFBA), Fairground Road

(39°44.45 N, 84°00.51 W) which included an alkaline sedge meadow and groundwater-fed ponds. Other sites visited less frequently were a restored marsh on the property of Southdown Cement Company (SCC) (39°48.69, 84°00.41), and the Little Miami River (LMR) at John Bryan State Park (not a part of the Beaver Creek Wetlands). The specimens collected were preserved at the Dayton Museum of Natural History and were included in the Ohio Odonate Survey database. Questionable identifications were confirmed by Bob Glotzhofer of the Ohio Historical Society.

## RESULTS

We collected a total of 36 species (22 Anisoptera; 15 Zygoptera) including 11 new county records bringing the current Greene County list to 54. Following is a list of species with activity dates, habitats and specific localities (abbreviated in parentheses) in which specimens were collected:

### AESHNIDAE

- Aeshna constricta* Say, 1839 18 September 1997\*; fen (BWWA); **New Record**  
*Aeshna umbrosa* Walker, 1908 26 August - October; restored fen (BWWA); **New Record**  
*Anax junius* (Drury, 1770) 11 May - August; ponds, fens, marshes (BWWA), (OAL), (SFBA)

### GOMPHIDAE

- Arigomphus villosipes* (Selys, 1854) 15 June - 2 July\*; restored seasonal pond (BWWA); **New Record**  
*Dromogomphus spinosus* Selys, 1854 12 July 1997\*; river (LMR); **New Record**  
*Gomphus lividus* Selys, 1854 11 June 1997\*; fens (BWWA)

### MACROMIIDAE

- Macromia illinoiensis* Walsh, 1862 12 July 1997\*; river (LMR)

### CORDULIIDAE

- Epitheca princeps* Hagen, 1861 12 July 1997\*; river (LMR); **New Record**

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*Somatoclora tenebrosa* (Say, 1839) 20 July - September; fens and wet meadows (BWWA), (SFBA)

## LIBELLULIDAE

*Celitemis elisa* (Hagen, 1861) 20 June 1997\*; restored marsh (SCC); **New Record**

*Erythemis simplicicollis* (Say, 1839) 31 May - August; fens, fields, ponds, marshes (BWWA), (OAL), (SFBA)

*Libellula luctuosa* Burmeister, 1839 15 June - 19 July; fields and fens (BWWA)

*Libellula lydia* Drury, 1770 11 May - September; fields, restored fen, ponds, marshes (BWWA), (OAL), (SFBA)

*Libellula pulchella* (Drury, 1770) 23 May - September; ponds, restored fen, marshes (BWWA), (OAL), (SFBA)

*Libellula semifasciata* Burmeister, 1839 19 May - July; restored fen (BWWA)

*Pachydiplax longipennis* (Burmeister, 1839) 31 May - August; restored fen, fields, ponds, marshes (BWWA), (OAL), (SFBA)

*Pantala flavescens* (Fabricius, 1798) 19 August - 15 September; fields (BWWA); **New Record**

*Perithemis tenera* (Say, 1839) 21 August 1997\*; restored marsh (OAL)

*Sympetrum rubicundulum* (Say, 1839) 15 June - 15 September; fens, wet meadows (BWWA), (SFBA)

*Sympetrum semicinctorum* (Say, 1839) 15 June - 27 July; restored marsh, fields (OAL), (BWWA)

*Sympetrum vicinum* (Hagen, 1861) 13 September 1996\*; ponds (SFBA)

*Tramea lacerata* (Hagen, 1861) 19 May - 19 September; ponds (SFBA)

## CALOPTERYGIDAE

*Calopteryx maculata* (Beauvois, 1806) 15 June - July; river (BWWA)

*Hetaerina americana* (Fabricius, 1798) 12 July 1997\*; river (LMR)

## LESTIDAE

*Archilestes grandis* (Rambur, 1842) 12 October 1997\*; restored fen (BWWA)

*Lestes congener* Hagen, 1861 4 June - October 11; restored seasonal pond (BWWA); **New Record**

*Lestes disjunctus australis* Walker, 1862 11 June 1997\*; restored seasonal pond (BWWA); **New Record**

*Lestes rectangularis* Say, 1839 4 June - September; fens and restored seasonal pond (BWWA)

*Lestes unguiculatus* Hagen, 1861 18 September - 15 October; restored fen (BWWA); **New Record**

## COENAGRIONIDAE

*Amphiagrion saucium* (Burmeister, 1839) 18 May - July; fens (BWWA)

*Argia moesta* (Hagen, 1861) 31 May 1996\*; restored seasonal pond (BWWA)

*Argia fumipennis* (Hagen, 1861) 9 July - 19 July; fens (BWWA)

*Enallagma civile* (Hagen, 1861) 31 May - October; restored seasonal pond, restored fen (BWWA)

*Ischnura hastata* (Say, 1839) 18 May 1997\*; seasonal pond (SFBA); **New Record**

*Ischnura posita* (Hagen, 1861) 19 May - October; ponds, restored fen, marshes (BWWA), (OAL), (SFBA)

*Ischnura verticalis* (Say, 1839) 26 April - October; ponds, restored fen, marshes (BWWA), (OAL), (SFBA)

\* These species were collected on a single occasion.

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