

Odonata of Halton Region, Ontario

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Abstract: This article is a summary of the annotated checklist of the odonates of Halton (in press, with data to 2004), with the added inclusion of the seven species found new for the Region in 2005. These new species bring the regional total to 87 taxa, including several provincially significant species.

Halton Region is on the northern edge of western Lake Ontario, wedged between Peel Region and the City of Hamilton (to the northeast and southwest), and bordered to the north by Wellington Region. With an area of nearly one thousand square kilometers and bisected by the Niagara Escarpment, Halton features diverse habitats, although it is suffering from rapid urbanization. Despite its proximity to Toronto, Halton's odonate fauna was historically undersampled; as of 2000, only 49 species were recorded from the Region (Catling and Brownell 2000).

As part of the Halton Natural Areas Inventory (NAI), Bob Curry and Alan Wormington surveyed Halton for Odonata during 2003 and 2004. Their extensive observations, combined with those of other current local odophiles (particularly the author, Brenda Van Ryswyk, and Bill and Irene McIlveen) permitted, for the first time, the production of an Odonata checklist for Halton.

This checklist (Rothfels in press), included within the overall Halton NAI (Dwyer in press), features a discussion of the key "results" of our current picture of the Region's odofauna, followed by an annotated species list. The species list includes the species' global and provincial conservation ranks, regional abundance status (common, uncommon, or rare), the species' regional residency status (permanent resident, temporary resident, breeding immigrant, or vagrant), its known Halton flight period, its known Ontario flight period, and, for rare or uncommon species, a list of stations. All species accounts also include a brief annotation, often featuring information on the species' ecology or local status.

I took a conservative approach to drafting the species list by limiting it to species that are documented with vouchers (specimens or photographs); I occasionally made an exception for species that are particularly easy to identify or that are locally common. This criterion undoubtedly causes some species to appear disproportionately rare. For example, there is only one vouchered station of *Lestes disjunctus* (Northern Spreadwing) for Halton, but many sight records, a significant portion of which are probably accurate. Without a voucher, however, I could not eliminate the possibility that the *Lestes disjunctus* record might be due to a misidentified *Lestes forcipatus* (Sweetflag Spreadwing) or *Lestes australis* (Southern Spreadwing).

Following the species accounts is a list of eight taxa that have been reported from the Region but are excluded from the main accounts due to an absence of sufficient documentation (five of them were subsequently confirmed in 2005), and a second list of species that are found in nearby regions and thus have a good chance of showing up in Halton.

In this article I will summarize our current knowledge of Halton's odofauna, including the seven species discovered new to the region in 2005 (see Table 2). Note: the only data included from 2005 are the records of the new regional species. New stations of other regionally rare or uncommon species from 2005 are not included.

In the following tables, "R" indicates that the species is known from five or fewer Halton stations (where "station" is loosely defined as a population, observed between 1980 and 2004, and separated by at least one kilometer from other such populations); "U" indicates six to 15 stations; and "C" indicates more than 15 stations. The number of stations for rare and uncommon species follows the status designation, in parentheses.

Species are presented alphabetically within families; the family order and taxonomic treatment follows that of *The Odonata of North America* (Paulson 2003).

At 87 species, the known odonate fauna of Halton Region rivals or exceeds that of most other Ontario municipalities. A seemingly disproportionate number of species, however, are regionally rare (see

Table 4), and common species are mostly those that are tolerant of disturbance and eutrophic waters (especially *Ischnura verticalis*, *Lestes rectangularis*, and many skimmers). Hopefully these results—the 2004 checklist and the new 2005 species—will promote the consideration of the effects of developments on odonates among planning authorities, and increase the attention devoted to this group of organisms by local naturalists. There is certainly much more to be learned about local odonate biodiversity.

Acknowledgments:

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References:

Catling, P.M., and V.R. Brownell. 2000. Damselflies and dragonflies (Odonata) of Ontario: Resource Guide and Annotated List. Metcalfe, Ontario.

Dwyer, J. (ed). In press. Halton Natural Areas Inventory. Hamilton Naturalists' Club, Halton-North Peel Naturalists' Club, and South Peel Naturalists' Club. Hamilton, Ontario.

Paulson, D.R. 2003. The Odonata of North America. Slater Museum of Natural History. University of Puget Sound. At: <http://www.ups.edu/biology/museum/NAdragons.html>. Accessed on December 20, 2005.

Rothfels, C.J. In press. Dragonflies and Damselflies (Odonata) of Halton Region, Ontario. 21 pp. In: Halton Natural Areas Inventory, Volume II. Species Accounts. J. Dwyer (ed.). Hamilton Naturalists' Club, Halton-North Peel Naturalists' Club, and South Peel Naturalists' Club. Hamilton, Ontario.

Table 1: 2004 Halton species list

Common Name	Scientific Name	Regional Status
CALOPTERYGIDAE		
<i>Calopteryx aequabilis</i>	River Jewelwing	U (11)
<i>Calopteryx maculata</i>	Ebony Jewelwing	C
<i>Hetaerina americana</i>	American Rubyspot	R (4)
LESTIDAE		
<i>Lestes congener</i>	Spotted Spreadwing	U (6)
<i>Lestes disjunctus</i>	Northern Spreadwing	R (1)
<i>Lestes dryas</i>	Emerald Spreadwing	C
<i>Lestes eurinus</i>	Amber-winged Spreadwing	R (3)
<i>Lestes rectangularis</i>	Slender Spreadwing	C
<i>Lestes unguiculatus</i>	Lyre-tipped Spreadwing	U (14)
COENAGIONIDAE		
<i>Amphagrion saucium</i>	Eastern Red Damsel	R (4)
<i>Argia apicalis</i>	Blue-fronted Dancer	R (3)
<i>Argia fumipennis violacea</i>	Violet Dancer	U (13)
<i>Argia moesta</i>	Powdered Dancer	R (4)
<i>Chromagrion conditum</i>	Aurora Damsel	R (2)
<i>Coenagrion resolutum</i>	Taiga Bluet	R (2)
<i>Enallagma antennatum</i>	Rainbow Bluet	R (2)
<i>Enallagma aspersum</i>	Azure Bluet	R (5)
<i>Enallagma boreale</i>	Boreal Bluet	R (2)
<i>Enallagma carunculatum</i>	Tule Bluet	R (5)

<i>Enallagma civile</i>	Familiar Bluet	C
<i>Enallagma cyathigerum</i>	Northern Bluet	R (1)
<i>Enallagma ebrium</i>	Marsh Bluet	C
<i>Enallagma exsulans</i>	Stream Bluet	R (5)
<i>Enallagma geminatum</i>	Skimming Bluet	R (3)
<i>Enallagma hageni</i>	Hagen's Bluet	R (5)
<i>Enallagma signatum</i>	Orange Bluet	R (3)
<i>Enallagma vernale</i>	Vernal Bluet	R (3)
<i>Ischnura posita</i>	Fragile Forktail	R (3)
<i>Ischnura verticalis</i>	Eastern Forktail	C
<i>Nehalennia irene</i>	Sedge Sprite	U (11)
AESHNIDAE		
<i>Aeshna canadensis</i>	Canada Darner	U (10)
<i>Aeshna constricta</i>	Lance-tipped Darner	C
<i>Aeshna interrupta</i> <i>interrupta</i>	Variable Darner	R (4)
<i>Aeshna umbrosa</i>	Shadow Darner	U (6)
<i>Aeshna verticalis</i>	Green-striped Darner	R (1)
<i>Anax junius</i>	Common Green Darner	C
<i>Basiaeschna janata</i>	Springtime Darner	R (5)
<i>Boyeria vinosa</i>	Fawn Darner	R (4)
<i>Epiaeschna heros</i>	Swamp Darner	R (1)
GOMPHIDAE		
<i>Arigomphus furcifer</i>	Lilypad Clubtail	R (3)
<i>Arigomphus villosipes</i>	Unicorn Clubtail	U (8)
<i>Gomphus exilis</i>	Lancet Clubtail	U (7)
<i>Gomphus fraternus</i>	Midland Clubtail	R (1)
<i>Gomphus graslinellus</i>	Pronghorn Clubtail	R (2)
<i>Gomphus lividus</i>	Ashy Clubtail	R (2)
<i>Gomphus spicatus</i>	Dusky Clubtail	U (8)
<i>Ophiogomphus</i> <i>rupinsulensis</i>	Rusty Snaketail	R (1)
CORDULEGASTRIDAE		
<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	R (5)
<i>Cordulegaster maculata</i>	Twin-spotted Spiketail	R (3)
<i>Cordulegaster obliqua</i>	Arrowhead Spiketail	U (6)
CORDULIIDAE		
<i>Epitheca canis</i>	Beaverpond Baskettail	U (10)
<i>Epitheca cynosura</i>	Common Baskettail	U (10)
<i>Epitheca princeps</i>	Prince Baskettail	R (5)
<i>Epitheca spinigera</i>	Spiny Baskettail	R (5)
<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	R (2)
<i>Somatochlora walshii</i>	Brush-tipped Emerald	U (6)
LIBELLULIDAE		
<i>Celithemis elisa</i>	Calico Pennant	C
<i>Celithemis eponina</i>	Halloween Pennant	R (5)
<i>Erythemis simplicicollis</i>	Eastern Pondhawk	C
<i>Ladona julia</i>	Chalk-fronted Corporal	C
<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface	C
<i>Leucorrhinia proxima</i>	Belted Whiteface	R (3)
<i>Libellula incesta</i>	Slaty Skimmer	R (1)
<i>Libellula luctuosa</i>	Widow Skimmer	C
<i>Libellula pulchella</i>	Twelve-spotted Skimmer	C
<i>Libellula quadrimaculata</i>	Four-spotted Skimmer	C

<i>Libellula semifasciata</i>	Painted Skimmer	R (2)
<i>Pachydiplax longipennis</i>	Blue Dasher	C
<i>Pantala flavescens</i>	Wandering Glider	R (2)
<i>Pantala hymenaea</i>	Spot-winged Glider	R (1)
<i>Perithemis tenera</i>	Eastern Amberwing	U (8)
<i>Plathemis lydia</i>	Common Whitetail	C
<i>Sympetrum costiferum</i>	Saffron-winged Meadowhawk	R (3)
<i>Sympetrum internum</i>	Cherry-faced Meadowhawk	C?
<i>Sympetrum obtrusum</i>	White-faced Meadowhawk	C
<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	C?
<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk	U (11)
<i>Sympetrum vicinum</i>	Autumn Meadowhawk	U (6)
<i>Tramea lacerata</i>	Black Saddlebags	C

Table 2: Species added in 2005

<i>Lestes forcipatus</i>	Sweetflag Spreadwing	R (1)
<i>Lestes inaequalis</i>	Elegant Spreadwing	R (1)
<i>Lestes vigilax</i>	Swamp Spreadwing	R (2)
<i>Enallagma traviatum</i>	Slender Bluet	R (1)
<i>Enallagma vesperum</i>	Vesper Bluet	R (1)
<i>Aeshna tuberculifera</i>	Black-tipped Darner	R (1)
<i>Somatochlora williamsoni</i>	Williamson's Emerald	R (3)

Table 3: Halton's provincially significant odonata

Species		Global/ Provinci al Status	# of Halton Statio ns
<i>Lestes eurinus</i>	Amber-winged Spreadwing	G4/S3	3
<i>Lestes vigilax</i>	Swamp Spreadwing	G5/S3	2*
<i>Amphiagrion saucium</i>	Eastern Red Damsel	G5/S3	4
<i>Enallagma aspersum</i>	Azure Bluet	G5/S3	5
<i>Enallagma cyathigerum</i>	Northern Bluet	G5/S3	1
<i>Enallagma traviatum</i>	Slender Bluet	G5/S1	1
<i>Enallagma vernale</i>	Vernal Bluet	G4Q/S3	3
<i>Aeshna verticalis</i>	Green-striped Darner	G5/S2	1
<i>Epiaschna heros</i>	Swamp Darner	G5/S2S3	1
<i>Arigomphus furcifer</i>	Lilypad Clubtail	G5/S3	3
<i>Arigomphus villosipes</i>	Unicorn Clubtail	G5/S1S2	8
<i>Gomphus fraternus</i>	Midland Clubtail	G5/S3	1
<i>Gomphus graslinellus</i>	Pronghorn Clubtail	G5/S2	2
<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail	G5/S3	1
<i>Cordulegaster diastatops</i>	Delta-spotted Spiketail	G5/S3	5
<i>Cordulegaster obliqua</i>	Arrowhead Spiketail	G4/S1	6
<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	G5/S2	2
<i>Somatochlora walshii</i>	Brush-tipped Emerald	G5/S3	6

Species		Global/ Provinci al Status	# of Halton Statio ns
<i>Somatochlora williamsoni</i>	Williamson's emerald	G5/S3	3*
<i>Celithemis eponina</i>	Halloween Pennant	G5/S3	5
<i>Libellula semifasciata</i>	Painted Skimmer	G5/S2	2
<i>Perithemis tenera</i>	Eastern Amberwing	G5/S3	8

*These species' station counts include 2005 data; the station counts for all other species include only those stations recorded between 1980 and 2004, inclusive.

Table 4: Halton's odonate fauna by regional abundance.

Regional Abundance	Damselflies	Dragonflies	Total
Common	6	15	21
Uncommon	5	11	16
Rare	24	24	48