

Title: Connectivity of stormwater ponds impacts Odonata abundance and species richness

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Supplementary Information

This supplementary file contains the species name acronyms as well as transformation-based redundancy analyses of the damselfly species composition data with the mean current and the number of surrounding habitats. Adult damselfly species composition was tested for relationships with mean current at a 300 m scale. The mean current at a 300 m scale was significantly associated with damselfly species composition ($R^2 = 0.06$, $p = 0.002$). The RDA model ($p = 0.004$) and axis ($p = 0.001$) were significant. The proportion of unconstrained variation again was substantially higher than the proportion of constrained variation that can be explained by the model, 0.31 and 0.08 respectively. Adult damselfly species composition was also significantly associated with the number of surrounding habitats at a 300 m scale ($R^2 = 0.11$, $p = 0.002$). The RDA model ($p = 0.001$) and axis ($p = 0.001$) were significant. The proportion of unconstrained variation again was substantially higher than the proportion of constrained variation explained by the model, 0.30 and 0.04 respectively.

Table S2. Odonata (Zygoptera and Anisoptera) species at urban stormwater ponds (SWP, n=41) and natural ponds (NAT, n=8) with abbreviations used in Fig. 3, Fig S4-1, and Fig S4-2.

Scientific name	Abbreviation
Suborder: Zygoptera	
<i>Calopteryx maculata</i>	CALMAC
<i>Lestes congener</i>	LESCON
<i>Lestes disjunctus</i>	LESDIS
<i>Lestes dryas</i>	LESDRY
<i>Lestes eurinus</i>	LESEUR
<i>Lestes rectangularis</i>	LESREC
<i>Lestes unguiculatus</i>	LESUNI
<i>Argia fumipennis violacea</i>	ARGFUM
<i>Chromagrion conditum</i>	CHRCON
<i>Coenagrion resolutum</i>	COERES
<i>Enallagma annexum</i>	ENAANN
<i>Enallagma antennatum</i>	ENAANT
<i>Enallagma aspersum</i>	ENAASP
<i>Enallagma boreale</i>	ENABOR
<i>Enallagma civile</i>	ENACIV
<i>Enallagma ebrium</i>	ENAEBR
<i>Enallagma hageni</i>	ENAHAG
<i>Ischnura verticalis</i>	ISCVER
<i>Nehalennia irene</i>	NEHIRE
Suborder: Anisoptera	
<i>Aeshna canadensis</i>	AESCAN
<i>Aeshna constricta</i>	AESCON
<i>Aeshna tuberculifera</i>	AESTUB
<i>Aeshna umbrosa</i>	AESUMB
<i>Anax junius</i>	ANAJUN
<i>Arigomphus cornutus</i>	ARICOR
<i>Dromogomphus spinosus</i>	DROSPI
<i>Epiheca cynosura</i>	EPICYN
<i>Epiheca canis</i>	EPICAN
<i>Epiheca princeps</i>	EPIPRI
<i>Cordulia shurtleffi</i>	CORSHU
<i>Dorocordulia libera</i>	DORLIB
<i>Celithemis elisa</i>	CELELI
<i>Erythemis simplicicollis</i>	ERYSIM
<i>Leucorrhinia frigida</i>	LEUFRI
<i>Leucorrhinia intacta</i>	LEUINT
<i>Leucorrhinia proxima</i>	LEUPRO
<i>Pachydiplax longipennis</i>	PACLON
<i>Perithemis tenera</i>	PERTEN
<i>Ladona julia</i>	LADJUL
<i>Libellula luctuosa</i>	LIBLUC
<i>Libellula pulchella</i>	LIBPUL
<i>Libellula quadrimaculata</i>	LIBQUA
<i>Plathemis lydia</i>	PLALYD
<i>Sympetrum costiferum</i>	SYM COS
<i>Sympetrum internum</i>	SYMINT
<i>Sympetrum obtrusum</i>	SYM OBT
<i>Sympetrum semicinctum</i>	SYMSEM
<i>Sympetrum vicinum</i>	SYMVIC

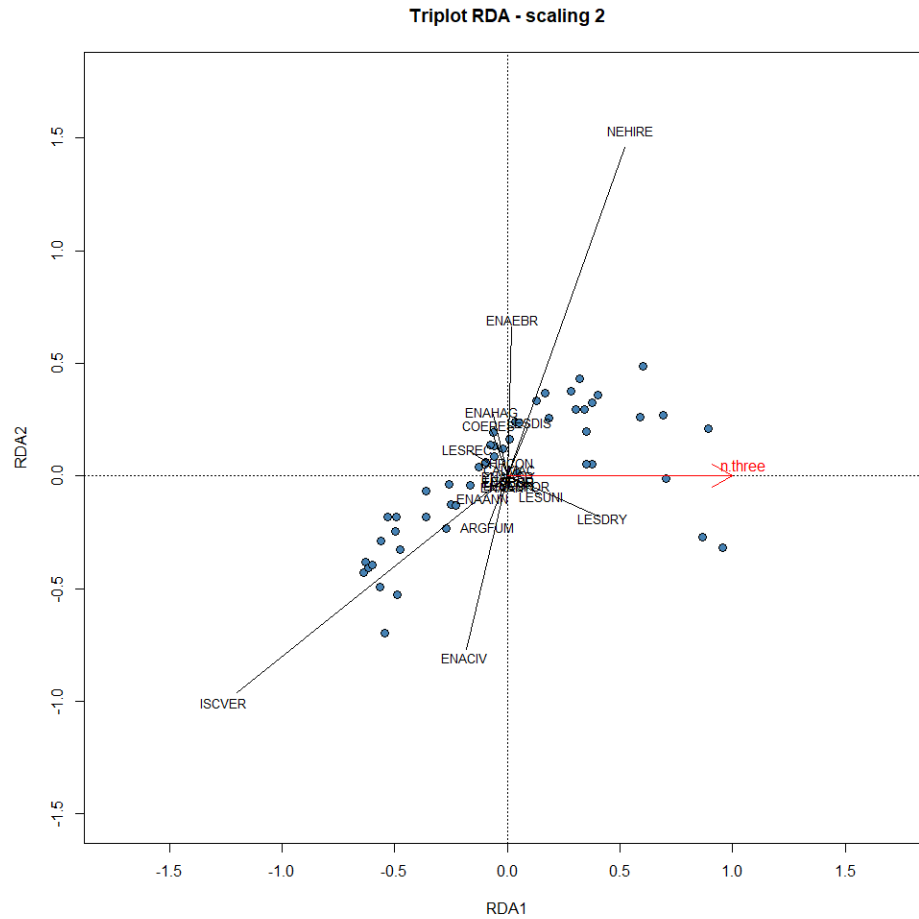


Figure S4-2. Transformation based-redundancy analysis (tb-rda), using a Hellinger transformation, of the relationship between adult damselfly species composition (black vectors without arrows) and the number of surrounding habitats at a 300m scale (n.three) at urban ponds (n = 49).