

## Supplementary material

Table S1. Localization and main characteristics of the study ponds. Site names refer to their localization in Fig. 1. MI: medium-sized isolated ponds; MN: medium-sized natural ponds; SI: small isolated ponds; SN: small natural ponds

Site	Type	Latitude (N)	Longitude (W)	Area (m <sup>2</sup> )	Perimeter(m)
A	MI	47°02'02.3"	65°05'13.2"	9 970	395
G	MI	46°58'28.4"	64°51'50.4"	29 610	1 008
I	MI	47°01'07.1"	64°51'54.8"	30 020	1 185
I	MI	47°01'13.8"	64°51'53.7"	20 230	978
D	MN	46°58'36.1"	64°58'01.1"	19 400	887
F	MN	46°57'27.8"	64°53'40.0"	25 070	1 157
F	MN	46°57'26.9"	64°53'58.9"	22 470	662
H	MN	46°59'25.1"	64°50'54.5"	16 980	885
J	MN	47°04'22.9"	64°49'25.4"	10 140	584
G	SI	46°58'32.6"	64°51'41.5"	690	112
C	SI	46°59'13.0"	64°59'04.7"	490	88
A	SI	47°02'17.5"	65°05'00.9"	420	109
I	SI	47°01'12.0"	64°51'43.1"	160	54
C	SI	46°59'11.7"	64°59'03.7"	650	112
C	SI	46°59'10.7"	64°59'12.5"	590	97
B	SI	46°59'57.6"	64°58'16.7"	660	96
A	SI	47°02'14.9"	65°05'02.7"	260	74
F	SN	46°57'12.5"	64°53'50.7"	300	73
D	SN	46°58'45.4"	64°57'49.8"	530	94
H	SN	46°59'39.9"	64°51'02.1"	420	86
H	SN	46°59'39.6"	64°50'58.2"	340	79
E	SN	46°55'34.7"	64°53'38.9"	180	58
F	SN	46°57'11.1"	64°53'49.6"	650	101
F	SN	46°57'18.2"	64°54'11.5"	540	106
J	SN	47°04'16.4"	64°49'06.3"	730	103

Table S2. Relative densities of odonates (individuals m<sup>-2</sup>; mean ± SD) estimated from exuviae collected and species sampled (listed by decreasing frequency). N: number of exuviae by genus and species; MI: medium-sized isolated pond; MN: medium-sized natural pond; SI: small isolated pond; SN: small natural pond. Damselfly exuviae (*Lestes*, *Enallagma* and *Nehalennia*) were identified to the genus level; species listed were identified from emerging specimens or from adults (for species in brackets). Dragonfly exuviae (other genera) were identified to the species level, except some *Aeshna* and *Sympetrum*. No density estimate is provided for species that were very rare in bog ponds (< 10 exuviae collected).

Genus	Species	N	MI (n = 4)	MN (n = 5)	SI (n = 8)	SN (n = 8)
<i>Lestes</i>		1487	0.100 ± 0.131	0.41 ± 0.27	0.97 ± 0.66	1.82 ± 1.87
	<i>disjunctus, eurinus</i>					
<i>Enallagma</i>		3321	0.60 ± 0.55	1.56 ± 0.73	0.54 ± 0.33	1.47 ± 1.03
	<i>annexum, (hageni), aspersum, (boreale)</i>					
<i>Nehalennia</i>		40	0	0.002 ± 0.003	0.004 ± 0.012	0.14 ± 0.33
	<i>gracilis, (irene)</i>					
<i>Aeshna</i>		253	0.063 ± 0.043	0.078 ± 0.043	0.071 ± 0.104	0.224 ± 0.192
	<i>eremita</i>	208	0.059 ± 0.040	0.070 ± 0.041	0.035 ± 0.077	0.139 ± 0.129
	<i>subarctica</i>	21	0	0	0.031 ± 0.046	0.048 ± 0.084
	<i>umbrosa, interrupta, tuberculifera</i>					
<i>Cordulia</i>	<i>shurtleffi</i>	423	0.077 ± 0.108	0.36 ± 0.72	0.012 ± 0.018	0.14 ± 0.35
<i>Somatochlora</i>	<i>cingulata</i>	29	0.001 ± 0.002	0.029 ± 0.040	0	0
<i>Celithemis</i>	<i>elisa</i>	1				
<i>Ladona</i>	<i>julia</i>	409	0.16 ± 0.25	0.123 ± 0.115	0.180 ± 0.172	0.104 ± 0.132
<i>Leucorrhinia</i>	<i>glacialis</i>	3811	0.21 ± 0.28	1.39 ± 1.71	2.41 ± 1.59	3.91 ± 1.53
<i>Sympetrum</i>		352	0.079 ± 0.089	0.179 ± 0.204	0.087 ± 0.186	0.094 ± 0.230
	<i>costiferum</i>	276	0.072 ± 0.087	0.131 ± 0.151	0.056 ± 0.135	0.061 ± 0.174
	<i>vicinum, internum s.l.<sup>1</sup>, danae</i>					

<sup>1</sup> *Sympetrum internum s.l.* comprises *S. internum/janae*, *S. obtrusum* and *S. rubicundulum* in sampled bog ponds.