

## Supplementary I

### Sample Coverage Method results.

	Coverage	Richness	Abundance
PC01	0.725	7	14
PC03	0.612	8	12
PC05	0.625	3	4
PC06	0.795	10	23
PC07	0.543	10	15
PC08	0.818	4	11
PC09	0.506	11	18
PM01	0.500	6	10
PM02	0.624	11	18
PM03	0.720	9	17
PM04	0.576	13	21
PM05	0.750	13	32

### Principal Coordinates of Neighbor Matrices (PCNM).

Spacial predictors	Obs	Std.Obs	Pvalue
PCNM1	0.836	3.268	<b>0.001</b>
PCNM2	0.759	3.114	<b>0.001</b>
PCNM3	-0.172	-0.311	0.626
PCNM4	0.055	0.523	0.288
PCNM5	-0.177	-0.309	0.612
PCNM6	-0.489	-1.414	0.913
PCNM7	-0.689	-2.189	<b>0.988</b>

1 **Supplementary II – Predictors data set detailed.**

Site	Environmental variables								Landscape			
	Phosphor	Temperature	Conductivity	Width	Depth	Canopy cover	HII	pH	Forest (30m buffer)	Forestal regeneration (30m buffer)	Forest (30m buffer)	Forestal regeneration (150m buffer)
PC01	0.1250	27.2400	0.0210	9.1367	38.3833	86.4379	0.7917	5.3900	0.0350	0.0000	0.0915	0.0816
PC03	0.2300	25.0650	0.0442	26.9311	51.2222	65.5773	0.5153	5.2050	0.0060	0.0232	0.1948	0.0000
PC05	0.9667	24.8950	0.0255	18.1961	51.5667	72.1133	0.4208	5.4500	0.0517	0.0000	0.0971	0.1174
PC06	0.0133	24.7250	0.0150	7.4250	21.3556	89.6514	0.7194	5.3000	0.0079	0.0370	0.3082	0.0000
PC07	0.4500	24.9900	0.0180	3.9450	38.4833	88.8889	0.7639	4.9100	0.0368	0.0000	0.0878	0.1877
PC08	0.4533	26.0050	0.0160	7.0817	33.5444	92.3747	0.8236	4.9350	0.0210	0.0147	0.2339	0.0000
PC09	0.8433	24.6450	0.0200	9.4367	12.1111	86.6013	0.6264	5.1600	0.0283	0.0107	0.1468	0.0846
PM01	0.2013	26.0000	0.2410	1.8983	15.4833	90.5229	0.5111	5.5700	0.0390	0.0000	0.1306	0.1127
PM02	0.0767	25.6100	0.1470	13.1500	28.8000	90.6863	0.5458	5.5400	0.0403	0.0000	0.2120	0.0000
PM03	0.4700	25.2950	0.0405	30.9897	38.8889	92.1569	0.5250	5.3250	0.0359	0.0022	0.2495	0.0000
PM04	0.5700	25.1250	0.0380	26.5556	71.7173	56.3181	0.2903	5.6150	0.0127	0.0170	0.2073	0.0323
PM05	0.4100	26.5500	0.0595	17.7339	54.0114	9.8039	0.1417	6.0900	0.0055	0.0187	0.0598	0.0854





4 **Supplementary IV – pRDA detailed results.**

<b>Partitions (pRDA)</b>	<b>Anisoptera</b>			<b>Zygoptera</b>		
	<b>Adj. R<sup>2</sup></b>	<b>F</b>	<b><i>p</i>-value</b>	<b>Adj. R<sup>2</sup></b>	<b>F</b>	<b><i>p</i>-value</b>
Environment   landscape	0.058	1.557	0.069	0.053	1.507	0.121
Environment   space	0.032	1.255	0.258	0.057	1.485	0.128
Space   landscape	-0.024	0.928	0.657	-0.021	0.938	0.602
Space   environment	-0.050	0.833	0.834	-0.026	0.910	0.678
Landscape   environment	0.024	1.127	0.292	-0.024	0.872	0.679
Landscape   space	0.024	1.096	0.374	-0.016	0.939	0.573

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