

Supporting Information. McNamara, S.C., M.R. Pintar, and W.J. Resetarits, Jr. 2020. Temperature but not nutrient addition affects abundance and assemblage structure of colonizing aquatic insects. *Ecology*.

Appendix S1

Table S1: Species and total abundances of colonizing beetles and hemipterans summed across the duration of the experiment. Taxa are sorted alphabetically by order and family. Identifications follow Pintar and Resetarits (2020a,b).

Taxon	Abundance	Taxon	Abundance
COLEOPTERA	2944	Hydrophilidae (continued)	
Dytiscidae	1181	<i>Cymbiodyta chamberlaini</i>	17
<i>Acilius fraternus</i>	1	<i>Enochrus consors</i>	2
<i>Acilius mediatum</i>	4	<i>Enochrus fimbriatus</i>	3
<i>Bidessonotus inconspicuus</i>	5	<i>Enochrus hamiltoni</i>	8
<i>Celina angustata</i>	1	<i>Enochrus interruptus</i>	5
<i>Copelatus chevrolati</i>	1	<i>Enochrus ochraceus</i>	666
<i>Copelatus glyphicus</i>	369	<i>Enochrus pygmaeus</i>	5
<i>Coptotomus loticus</i>	3	<i>Helochares maculicollis</i>	7
<i>Hydaticus bimarginatus</i>	4	<i>Hydrochara soror</i>	2
<i>Hydroporus rufilabris</i>	17	<i>Paracymus</i>	608
<i>Laccophilus fasciatus</i>	642	<i>Tropisternus blatchleyi</i>	34
<i>Laccophilus proximus</i>	103	<i>Tropisternus collaris</i>	63
<i>Meridiorhantus calidus</i>	2	<i>Tropisternus lateralis</i>	98
<i>Neoporus blanchardi</i>	9		
<i>Thermonectus basillaris</i>	16	HEMIPTERA	1226
<i>Uvarus lacustris</i>	4	Corixidae	358
Haliplidae	132	<i>Hesperocorixa</i>	85
<i>Peltodytes dunavani</i>	1	<i>Sigara</i>	273
<i>Peltodytes muticus</i>	1	Gerridae	72
<i>Peltodytes sexmaculatus</i>	130	<i>Limnopus canaliculatus</i>	72
Helophoridae	1	Nepidae	1
<i>Helophorus linearis</i>	1	<i>Ranatra buenoi</i>	1
Hydrophilidae	1630	Notonectidae	130
<i>Berosus aculeatus</i>	5	<i>Buenoa</i>	8
<i>Berosus exiguus</i>	8	<i>Notonecta irrorata</i>	122
<i>Berosus infuscatus</i>	96	Veliidae	665
<i>Berosus peregrinus</i>	3	<i>Microvelia</i>	665

Table S2: Detailed results of mixed effects repeated-measures analyses of environmental variables. H = heaters (0, 1, or 2 per mesocosm); N = nutrients (nutrient reagent added or not); W = week (15 measurement dates, except for chlorophyll and phosphate).

	SS	MS	Num DF	Den DF	<i>F</i>	<i>P</i>
Chlorophyll						
Heaters	1.481	0.741	2	30	2.231	0.1249
Nutrients	0.353	0.353	1	30	1.063	0.3110
H:N	0.592	0.2959	2	30	0.892	0.4206
Week	46.740	4.249	11	396	12.804	<0.0001
H:W	8.900	0.405	22	396	1.219	0.2270
N:W	5.649	0.514	11	396	1.547	0.1123
H:N:W	14.385	0.654	22	396	1.970	0.0060
Conductivity						
Heaters	0.0023	0.0012	2	30.15	58.058	<0.0001
Nutrients	0.0001	0.0001	1	30.15	3.538	<i>0.0697</i>
H:N	0.0000	0.0000	2	30.15	0.978	0.3878
Week	0.0058	0.0004	14	492.10	20.779	<0.0001
H:W	0.0021	0.0001	28	492.24	3.833	<0.0001
N:W	0.0002	0.0000	14	492.24	0.742	0.7323
H:N:W	0.0001	0.0000	28	492.24	0.254	1.0000
Nitrate						
Heaters	1.058	0.529	2	30.28	15.968	<0.0001
Nutrients	0.308	0.308	1	30.28	9.293	0.0047
H:N	0.034	0.017	2	30.28	0.518	0.6009
Week	56.418	4.030	14	492.19	121.599	<0.0001
H:W	1.301	0.047	28	492.72	1.402	<i>0.0849</i>
N:W	3.057	0.218	14	492.72	6.589	<0.0001
H:N:W	0.548	0.020	28	492.72	0.590	0.9547
pH						
Heaters	4.12	2.061	2	30	7.337	0.0007
Nutrients	1.34	1.34	1	30	4.763	0.0295
H:N	0.79	0.396	2	30	1.409	0.2454
Week	642.73	45.910	14	30	163.407	<0.0001
H:W	4.64	0.166	28	396	0.590	0.9548
N:W	1.11	0.079	14	396	0.282	0.9956
H:N:W	3.24	0.116	28	396	0.412	0.9971
Phosphate						
Heaters	0.0206	0.0103	2	30	4.988	0.0076
Nutrients	0.0053	0.0053	1	30	2.552	0.1117

H:N	0.0111	0.0056	2	30	2.684	<i>0.0707</i>
Week	0.0319	0.0064	5	30	3.081	0.0105
H:W	0.0121	0.0012	10	210	0.585	0.8250
N:W	0.0085	0.0017	5	210	0.825	0.5331
H:N:W	0.0171	0.0017	10	210	0.828	0.6019
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Temperature						
Heaters	0.341	0.170	2	30.23	236.672	<0.0001
Nutrients	0.000	0.000	1	30.23	0.397	0.5335
H:N	0.003	0.001	2	30.23	2.043	0.1472
Week	2.110	0.151	14	492.15	209.481	<0.0001
H:W	0.157	0.006	28	492.37	7.791	<0.0001
N:W	0.003	0.000	14	492.37	0.292	0.9947
H:N:W	0.022	0.001	28	492.37	1.114	0.3150

References

- Pintar, M. R., and W. J. Resetarits, Jr. 2020a. A comparison of aquatic and semiaquatic Heteroptera (Hemiptera) inhabiting natural habitats and experimental mesocosms at the University of Mississippi Field Station. *Aquatic Insects* 41:76–84.
- Pintar, M. R., and W. J. Resetarits, Jr. 2020b. Aquatic beetles (Coleoptera) of the University of Mississippi Field Station, Lafayette County, Mississippi, USA. *The Coleopterists Bulletin* 74:351–369.