

Scharnweber, K., Vanni, M. J., Hilt, S., Syväranta, J. and Mehner, T. 2014. Boomerang ecosystem fluxes: organic carbon inputs from land to lakes are returned to terrestrial food webs via aquatic insects. – Oikos doi: 10.1111/oik.01524

Appendix 1

Table A1. Species list of Chironomidae

Sub-family	Tribe	Species
Tanypodinae		<i>Tanypus punctipennis</i> (Meigen, 1818)
Chironominae	Chironomini	<i>Chironomus plumosus</i> (Linnaeus, 1758)
		<i>Cryptotendipes pseudotener</i> (Goetghebuer, 1922)
		<i>Glyptotendipes pallens</i> (Meigen, 1804)
		<i>Glyptotendipes paripe</i> (Edwards, 1929)
		<i>Polypedilum sordens</i> (van der Wulp, 1874)
		<i>Polypedilum (cf) tritum</i> (Walker, 1856)
		<i>Tribelos intextus</i> (Walker, 1856)
	Tanytarsini	<i>Tanytarsus</i> sp.

Appendix 2

Details of statistical analyses to compare carbon and nitrogen isotope signatures between lakes, treatments and months

Table A2. Model types are RM LMM (linear mixed model with factors lake, treatment and month (as repeated measure) as well as all two-way interactions), and model type GLM (univariate general linear model with factors lake, treatment and interactions of both) using $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ as dependent variable.

Dependent variable	Group	Model type	Effect	DF	F	p
$\delta^{13}\text{C}$	Aquatic larval Chironomidae	GLM	lake	1; 33	3.019	0.193
			treatment	1; 33	9.744	0.004
			lake \times treatment	1; 33	1.838	0.196
			error	29		
$\delta^{13}\text{C}$	Terrestrial adult Chironomidae	RM LMM	lake	1; 44.416	0.010	0.922
			treatment	1; 44.301	34.105	<0.0001
			month	1; 44.292	6.431	0.015
			lake \times treatment	1; 43.994	10.962	0.002
			lake \times month	1; 45.931	0.574	0.453
			treatment \times month	1; 44.876	0.004	0.947
$\delta^{13}\text{C}$	Tetragnathidae	RM LMM	lake	1; 37.469	16.981	0.0001
			treatment	1; 37.302	28.127	<0.0001
			month	1; 35.542	5.837	0.021

			lake × treatment	1; 35.949	3.959	0.054
			lake × month	1; 35.906	0.525	0.474
			treatment × month	1; 34.959	0.125	0.726
$\delta^{15}\text{N}$	Aquatic larval Chironomidae	GLM	lake	1; 33	15.057	0.001
			treatment	1; 33	0.021	0.885
			lake × treatment	1; 33	0.329	0.571
			error	29		
$\delta^{15}\text{N}$	Terrestrial adult Chironomidae	RM LMM	lake	1; 48.575	36.403	<0.0001
			treatment	1; 48.655	4.470	0.040
			month	1; 44.963	4.300	0.044
			lake × treatment	1; 48.869	<0.0001	0.983
			lake × month	1; 46.395	5.739	0.021
			treatment × month	1; 45.543	5.343	0.025
$\delta^{15}\text{N}$	Tetragnathidae	RM LMM	lake	1; 34.301	18.373	<0.0001
			treatment	1; 34.468	0.107	0.746
			month	1; 38.282	0.227	0.636
			lake × treatment	1; 34.821	0.067	0.797
			lake × month	1; 38.774	0.601	0.443
			treatment × month	1; 37.932	0.565	0.457
