Temperature dependence of biomass and ecosystem function depend on species interactions. Supplementary File 3: Zooplankton figures and tables.

Section S3.1: Zooplankton Abundance data over whole experiment

Figure S3. 1: Abundance of zooplankton (Number / 10L) over all tanks and weeks.

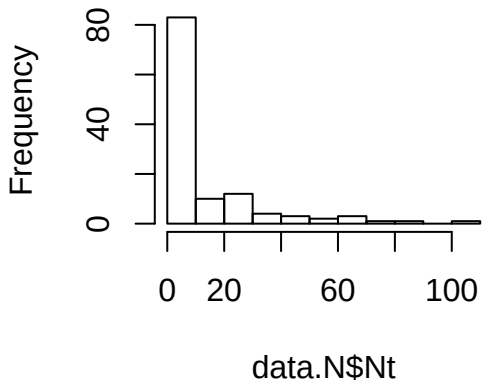
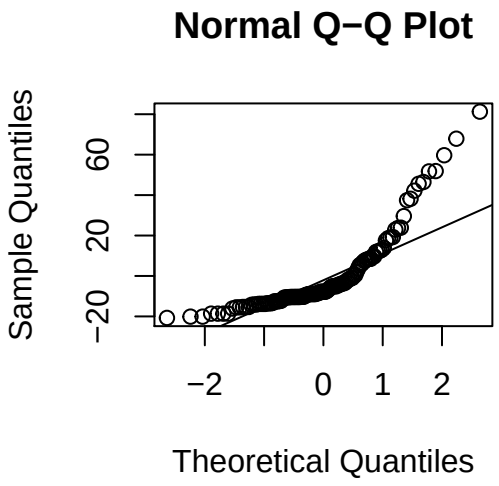


Figure S3. 2: Residual plot for linear model of abundance with normally distributed errors

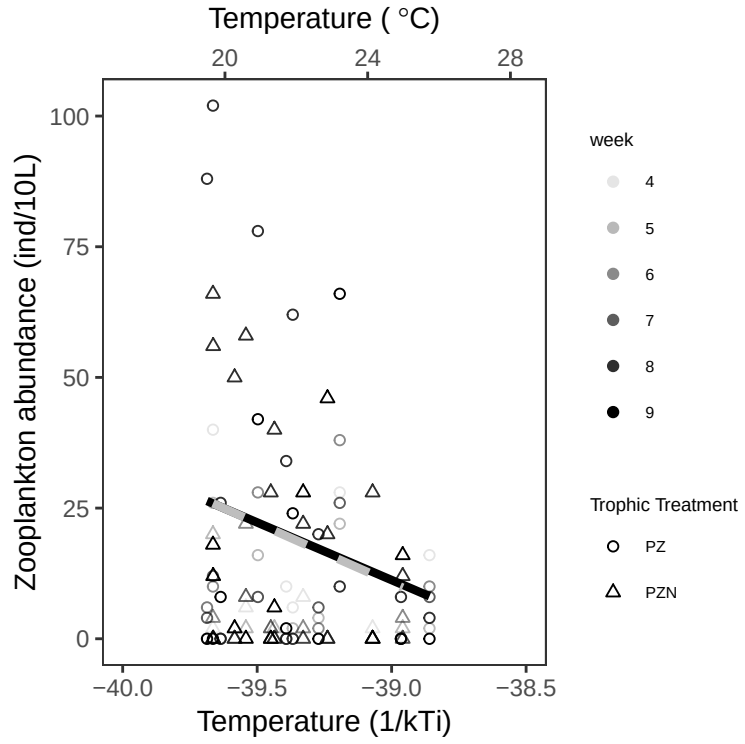



```
##       chisq       ratio         rdf           p
##  97.1449726   0.8374567 116.0000000   0.8975533
```

Table S3. 1: Model selection results for zooplankton abundance, with 1|Tank as a random effect. Model terms are: intercept (Int), Temperature - weekly average (Tw), trophic treatment (TL), statistical estimates

	Int	T_{wj}	Z_j	df	logLik	AICc	d	w
nbinommod1b	-47.41	1.28	NA	5	-367.00	744.53	0.00	0.49557915
nbinommod1	-48.76	1.32	+	6	-366.37	745.47	0.95	0.30895745
nbinommod1c	2.95	NA	NA	4	-369.46	747.26	2.74	0.12621312
nbinommod1a	3.07	NA	+	5	-368.97	748.46	3.94	0.06925027

Figure S3. 3: Total Zooplankton abundance and modeled temperature dependence from negative binomial regression



Section S3.2: Daphnia and Copepods

Figure S3. 4: Abundance of Daphnia and Copepods (Number / 10L) over all tanks and weeks.

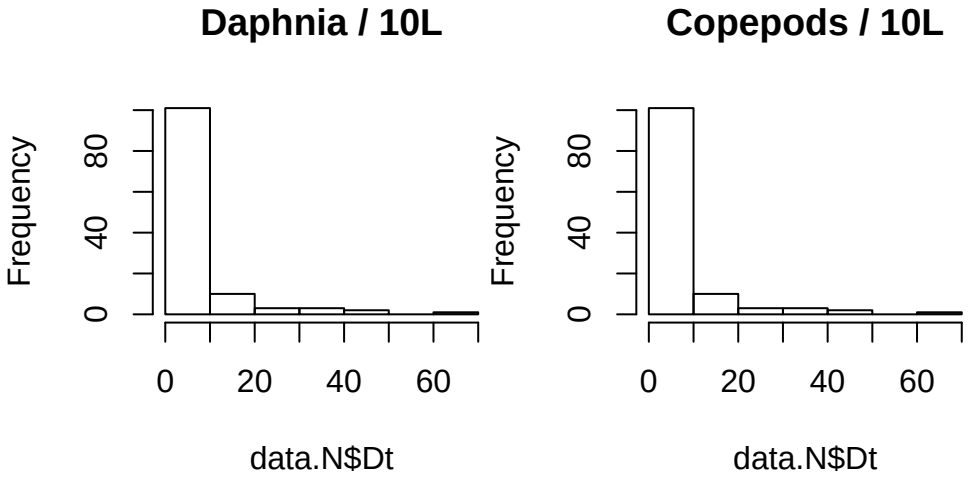


Table S3. 2: Daphnia abundance model selection results for Poisson regression. Model terms are: intercept (Int), trophic treatment (TL), Temperature - weekly average (Tw), and statistical estimates

	Int	T_{wj}	Z_j	T_{wj}*Z_j	df	logLik	AICc	d	w
poismod.Db	-34.88	0.88	+	NA	4	-115.75	239.85	0.00	0.63118106
poismod.Da	-38.64	0.97	+	+	5	-115.73	241.98	2.13	0.21709779
poismod.Dd	-0.97	NA	NA	NA	2	-119.71	243.52	3.67	0.10060719
poismod.Dc	-31.32	0.77	NA	NA	3	-119.33	244.87	5.03	0.05111395

Table S3. 3: Daphnia abundance model coefficients

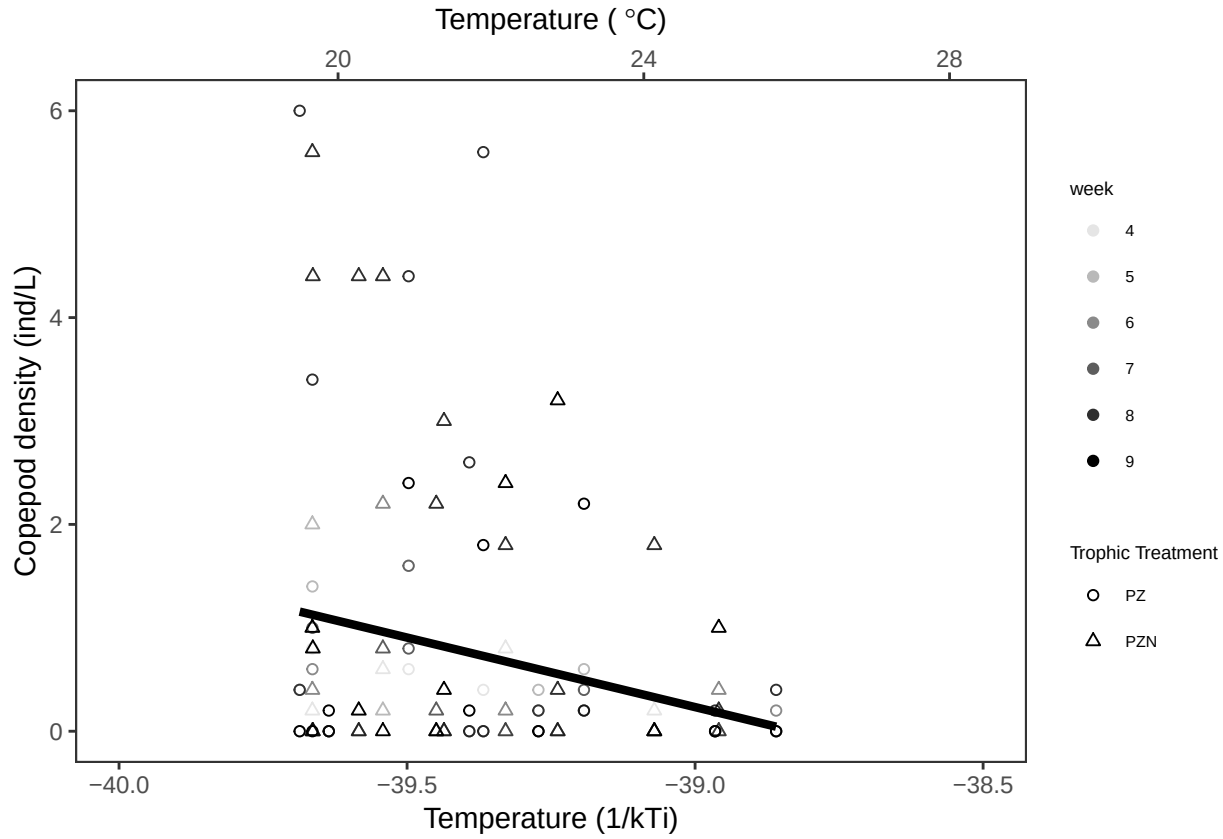
	Estimate	se	Pr(>|z|)	LL	UL
(Intercept)	-34.88	29.57	0.24	-92.85	23.08
invTT	0.88	0.75	0.24	-0.60	2.35
trophic.levelPZN	-1.14	0.40	0.00	-1.91	-0.36

Table S3. 4: Copepod abundance model selection results for Poisson regression. Model terms are: intercept (Int), trophic treatment (TL), Temperature - weekly average (Tw), temperature - expt average (Tt), interaction terms and statistical estimates

	Int	T_{wj}	Z_j	T_{wj}*Z_j	df	logLik	AICc	d	w
poismod.Cc	-87.63	2.21	NA	NA	4	-135.11	278.56	0.00	0.67753474
poismod.Cb	-87.50	2.21	+	NA	5	-135.10	280.72	2.16	0.23026158
poismod.Ca	-96.20	2.43	+	+	6	-135.04	282.83	4.27	0.07997327
poismod.Cd	-0.34	NA	NA	NA	3	-140.19	286.59	8.03	0.01223041

Table S3. 5: Copepod abundance model coefficients

	Estimate	se	Pr(>|z|)	LL	UL
(Intercept)	-87.63	28.01	0	-142.54	-32.73
invTT	2.21	0.71	0	0.82	3.61



Section S3.4: Zooplankton size analysis

Figure S3. 7: Zooplankton body size (length) over all tanks and weeks.

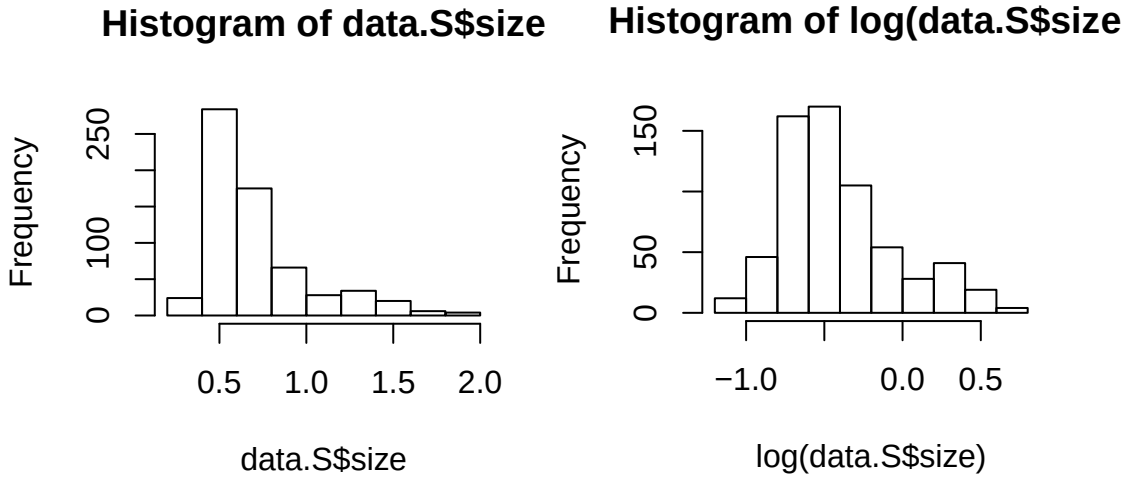


Table S3. 8: Zooplankton body size model selection results. Model terms are: intercept (Int), Temperature - weekly average (Tw), Taxon (Tx), trophic treatment (TL), and statistical estimates

	Int	T_{wj}	Tx	Z_j	T_{wj}*Tx	T_{wj}*Z_j	Tx*Z_j	df	logLik	AICc	d	w
m2g	-0.15	NA	+	+	NA	NA	+	6	-82.44	177.00	0.00	6.387048e-01
m2c	-0.15	-0.03	+	+	NA	NA	+	7	-82.37	178.91	1.91	2.459099e-01
m2l	-0.18	-0.21	+	NA	+	NA	NA	6	-84.95	182.04	5.03	5.156862e-02
m2j	-0.17	-0.20	+	+	+	NA	NA	7	-84.79	183.75	6.75	2.188876e-02
m2h	-0.18	NA	+	NA	NA	NA	NA	4	-88.14	184.33	7.33	1.634281e-02
m2b	-0.17	-0.13	+	+	+	+	NA	8	-84.22	184.68	7.67	1.377510e-02
m2e	-0.18	-0.08	+	NA	NA	NA	NA	5	-87.65	185.40	8.40	9.589407e-03
m2m	-0.16	-0.03	+	+	NA	+	NA	7	-87.07	188.33	11.32	2.220612e-03
m2i	-0.34	NA	NA	+	NA	NA	NA	4	-199.46	406.99	229.98	7.328805e-51
m2d	-0.34	-0.09	NA	+	NA	NA	NA	5	-199.22	408.54	231.54	3.369821e-51
m2k	-0.34	-0.24	NA	+	NA	+	NA	6	-198.45	409.04	232.03	2.631719e-51
m2f	-0.45	-0.12	NA	NA	NA	NA	NA	4	-204.15	416.36	239.36	6.747373e-53

Table S3. 9: Zooplankton size model estimates, from table S3.8

	Daphnia	Copepods
- Predators	0.86	0.54
+ Predators	0.71	0.66

Figure S3. 8: Zooplankton body size (length) and modeled effects of predation