Supplementary Material

The following materials are included:

Figure S1. Concentrations of TN and TP in the water column changed over time.

Figure S2. Biomass and density of the two snails changed over time in each mesocosm of control and warming treatment without fish present.

Figure S3. Relative biomass and density of both snails in each treatment.

Figure S4. Mean size of the snails during the experiment in each treatment.

Table S1. Means of the measured response variables and snail biomass and density during the experiment for different treatments.

Table S2. Weibull fitted results for biomass and density of each snail in each mesocosm in the control and warming treatment without fish.

Table S3. Differences of peaks of biomass and density of *R. swinhoei* between control and warming treatment without fish present.

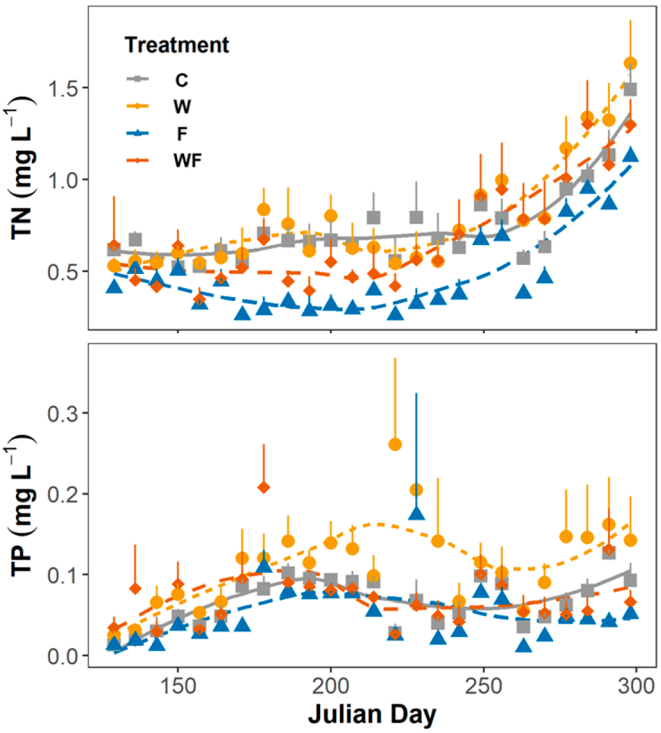

Figure S1. Concentrations of TN and TP in the water column changed over time. Vertical bars are standard errors. C for control, W for warming, F for predation and WF for warming and predation.

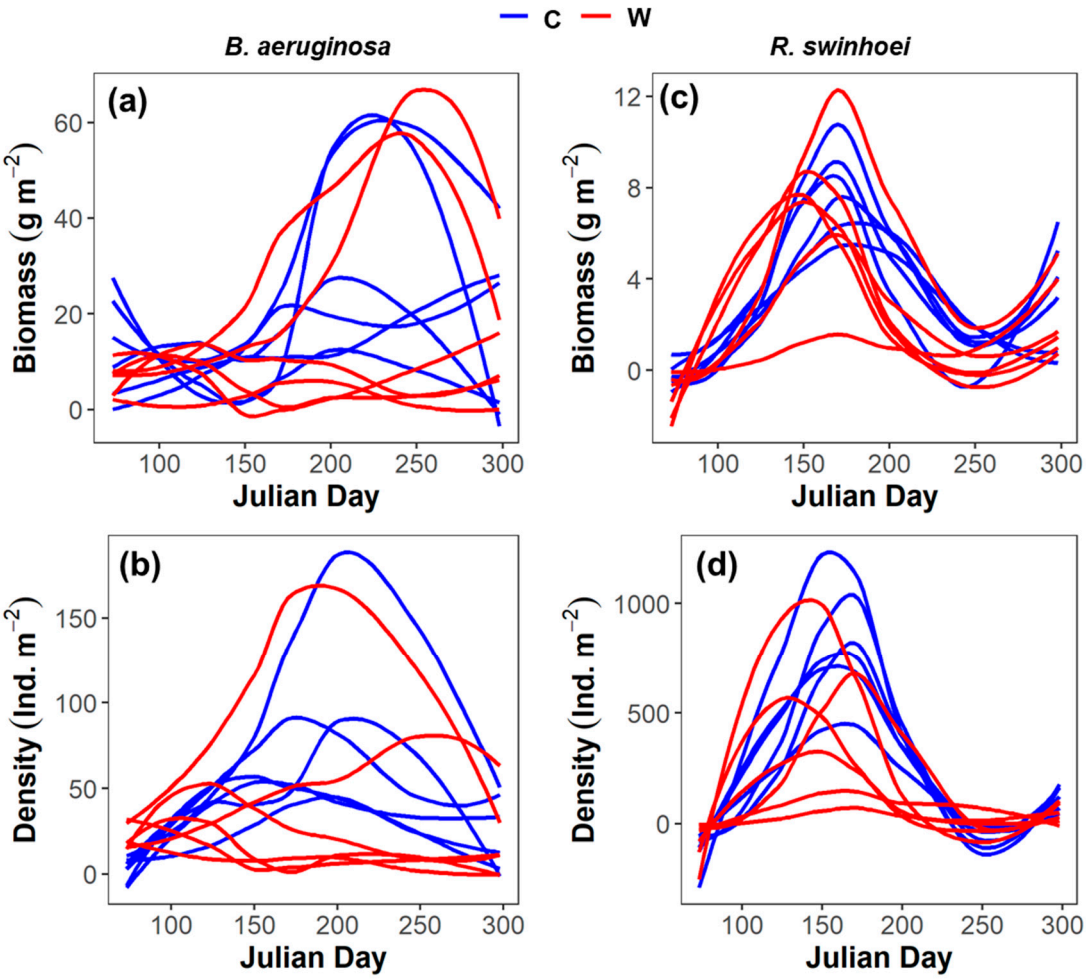

Figure S2. Biomass and density of the two snails changed over time in each mesocosm of control and warming treatment without fish present. Biomass (a) and density (b) of *B. aeruginosa*, and biomass (c) and density (d) of *R. swinhoel*. Blue indicates control and red indicates warming. The curves were fitted from the loess model in R package ggplot2. Weibull fitting results for biomass and density of each snail in each mesocosm can be found in Table S2.

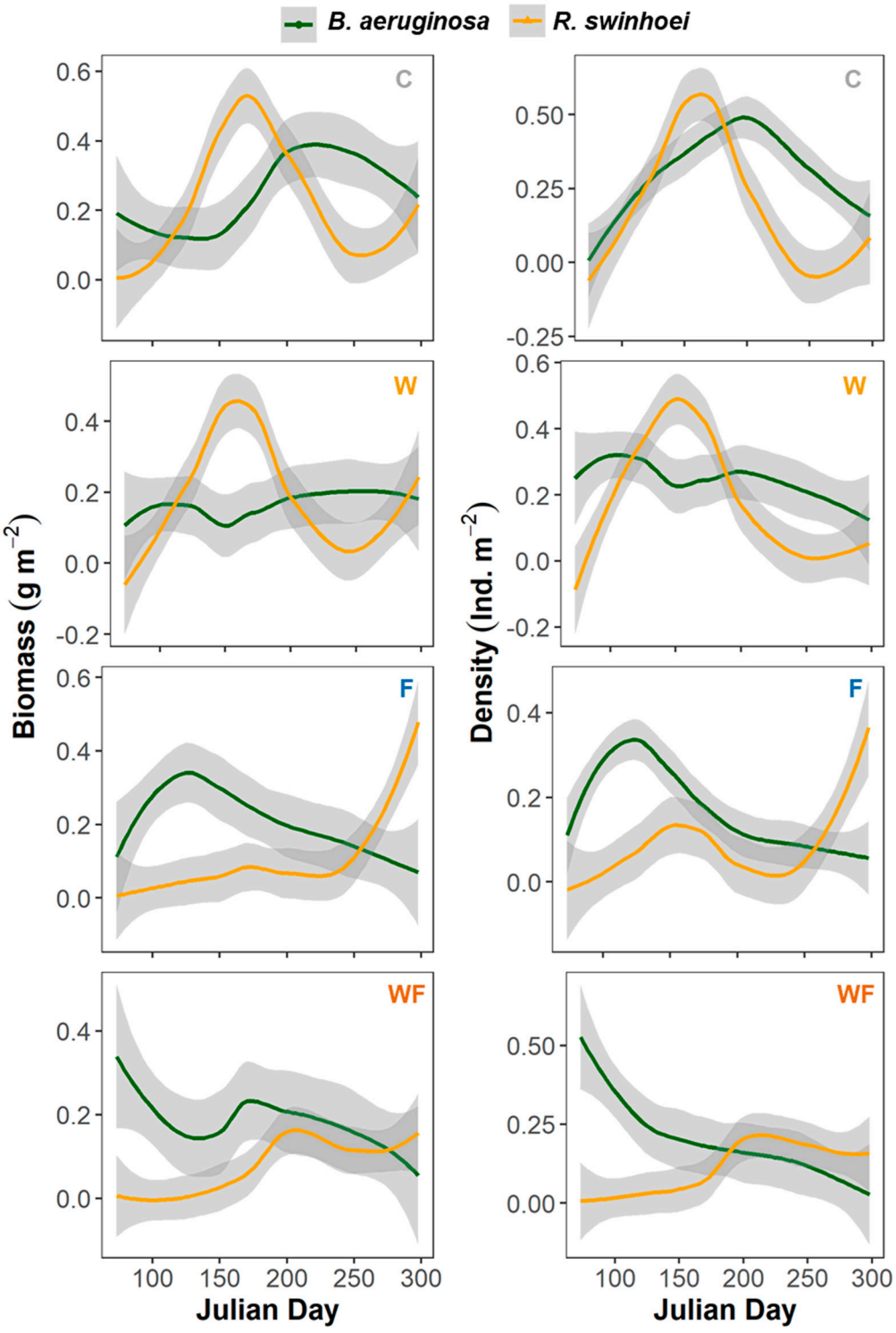

Figure S3. Relative biomass and density of both snails in each treatment. Data were normalized in each mesocosm by each snail (data were divided by the maximum value in each mesocosm) to diminish their different scales. The curves were fitted from the loess model in R package ggplot2. C for control, W for warming, F for predation and WF for warming and predation.

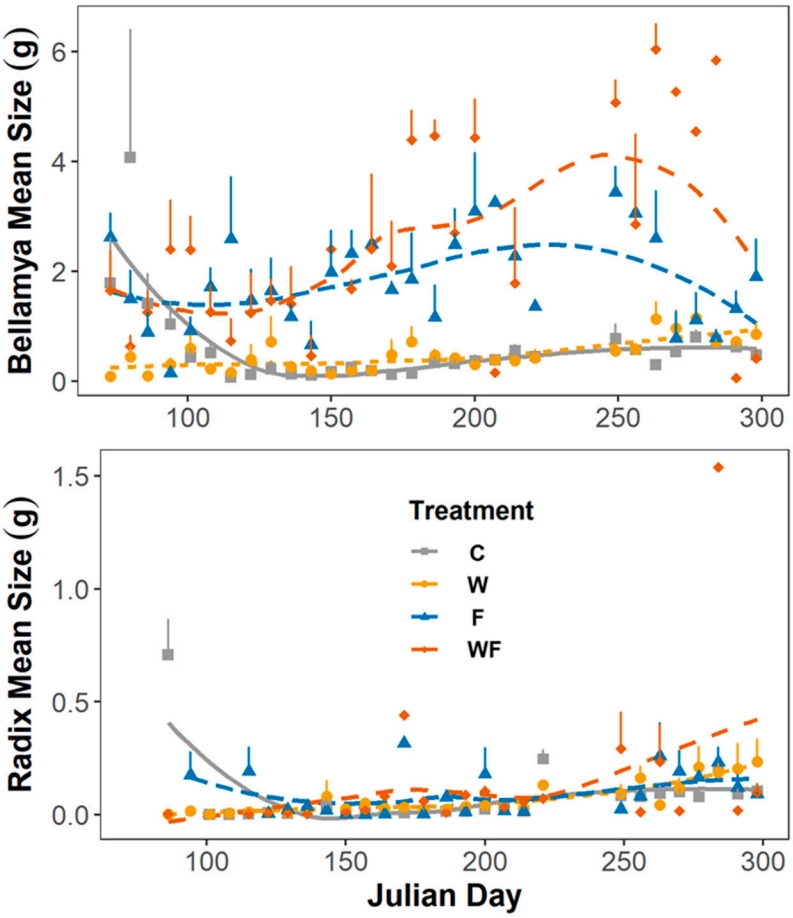

Figure S4. Mean size of the snails during the experiment in each treatment. Snail mean size = snail biomass/ snail density, in each mesocosm at each sampling date. Fish predation significantly increased mean size of B. aeruginosa during the experiment ($\chi 2 = 127.4$, $p < 0.0001$). No treatment effects were found for mean size of R. swinhoei.

Table S1. Means of the measured response variables and snail biomass and density during the experiment for different treatments.

	Parameters	Treatment	N	Mean	SD	SE
Measured response variables	Turbidity	Control	198	4.63	5.01	0.36
		Warming	198	4.50	5.10	0.36
		Fish	198	38.84	77.62	5.52
		Fish*Warming	198	100.28	115.84	8.23
	Chl. a	Control	198	6.11	5.95	0.42
		Warming	198	4.99	5.83	0.41
		Fish	198	12.53	9.82	0.70
		Fish*Warming	198	16.29	9.15	0.65
	Periphyton	Control	198	3.10	2.75	0.20
		Warming	198	8.49	10.44	0.74
		Fish	198	9.85	11.47	0.81
		Fish*Warming	198	21.65	21.41	1.52
B. aeruginosa	Biomass	Control	198	17.68	22.41	1.59
		Warming	198	14.04	23.43	1.67
		Fish	198	17.52	24.48	1.74
		Fish*Warming	198	12.96	23.14	1.64
	Density	Control	198	47.46	48.96	3.48
		Warming	198	35.43	49.44	3.51
		Fish	198	11.95	17.32	1.23
		Fish*Warming	198	7.16	10.23	0.73
R. swinhoei	Biomass	Control	198	3.16	4.02	0.29
		Warming	198	2.63	4.13	0.29
		Fish	198	1.05	3.23	0.23
		Fish*Warming	198	1.01	3.53	0.25
	Density	Control	198	275.85	421.41	29.95
		Warming	198	161.04	302.27	21.48
		Fish	198	13.49	33.65	2.39
		Fish*Warming	198	19.23	57.98	4.12

Table S2. Weibull fitted results for biomass and density of each snail in each mesocosm in the control and warming treatment without fish. Numbers in red indicate poor fittings.

Response variable	Treatment	Mesocosm number	*B. aeruginosa*			*R. swinhoei*		
			Time of peak	Peak value	r^2	Time of peak	Peak value	r^2
Biomass	Control	C1	190.74	66.42	0.71	172.98	17.71	0.85
		C2	59.73	32.64	0.34	178.27	15.81	0.76
		C3	207.57	118.24	0.80	179.58	7.45	0.52
		C4	271.18	52.26	0.49	185.19	5.68	0.51
		C5	190.28	43.31	0.29	168.52	10.91	0.80
		C6	293.73	24.38	0.37	162.41	13.35	0.71
	Warming	W1	Not applicable			156.39	8.94	0.63
		W2	102.83	33.23	0.47	180.80	2.68	0.59
		W3	176.86	17.21	0.65	131.95	10.76	0.66
		W4	100.27	50.59	0.64	156.27	7.94	0.70
		W5	190.18	58.97	0.57	165.83	12.52	0.82
		W6	220.60	108.24	0.75	178.42	20.83	0.81
Density	Control	C1	210.07	169.04	0.76	166.61	1327.17	0.91
		C2	177.59	89.45	0.79	160.21	1463.66	0.95
		C3	205.49	135.13	0.84	175.04	627.79	0.72
		C4	160.72	132.83	0.60	162.49	762.69	0.79
		C5	226.06	49.63	0.44	163.22	968.08	0.81
		C6	175.59	53.65	0.41	165.72	2086.49	0.95
	Warming	W1	106.26	58.62	0.74	135.22	300.86	0.97
		W2	126.52	88.75	0.88	150.08	111.44	0.94
		W3	Not applicable			127.13	1417.38	0.76
		W4	91.55	62.54	0.87	124.16	671.83	0.86
		W5	189.65	205.28	0.67	152.24	498.60	0.84
		W6	160.61	115.70	0.76	175.37	1130.37	0.96

Table S3. Differences of peaks of biomass and density of R. swinhoei between control and warming treatment without fish present. A six parameters Weibull function was fitted for each mesocosm. Independent t-tests were used to compare the differences between control and warming treatment without fish present. n = 6.

Response variable	Peak traits	Control	Warming	t	*p*
Biomass	Peak biomass (g m^{-2})	11.8 ± 4.7	10.6 ± 6.0	$t_{10} = 0.39$	0.77
	Time of peak (Julian day)	174.5 ± 8.2	161.6 ± 17.9	$t_{10} = 1.60$	0.14
Density	Peak density (Ind. m^{-2})	1206 ± 537	688 ± 499	$t_{10} = 1.73$	0.11
	Time of peak (Julian day)	165.5 ± 5.2	144.0 ± 19.2	$t_{5.7} = 2.65$	**0.04**