The following supplement accompanies the article

Variable bottom-up and top-down effects on diversity of different prey assemblages in an estuarine saltmarsh

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Supplement. Additional data

Table S1. Diatom composition in the study (ind. g^{-1} dry soil). Mean ± SE, n = 6. –Nutrient: natural nutrient amounts; +Nutrient: nutrient added; –Snail: without snail; +Snail: with snail

Species name	–Nutrient/–Snail	–Nutrient/+Snail	+Nutrient/–Snail	+Nutrient/+Snail
Achnanthes brevipes var.parvula	0 ± 0	152 ± 152	0 ± 0	0 ± 0
Actinocyclus ehrenbergii	1502 ± 602	2092 ± 503	970 ± 618	1163 ± 581
Actinoptychus senarius	0 ± 0	152 ± 152	0 ± 0	0 ± 0
Actinoptychus sp.	9962 ± 3420	9092 ± 2262	9127 ± 2188	10303 ± 2039
Actinoptychus undulatus	543 ± 354	696 ± 237	201 ± 201	524 ± 331
Amphora sp.1	848 ± 548	0 ± 0	514 ± 514	220 ± 220
Amphora sp.2	2260 ± 899	1303 ± 989	1356 ± 937	512 ± 338
Asterionella formosa	163 ± 163	0 ± 0	0 ± 0	220 ± 220
Aulacoseira alpigena	935 ± 333	1120 ± 413	1514 ± 977	220 ± 220
Aulacoseira granulata	4094 ± 1409	4570 ± 952	4236 ± 1500	6064 ± 1344
Bacillaria sp.	1684 ± 784	875 ± 441	6722 ± 4937	741 ± 475
Biddulphia sp.	249 ± 249	0 ± 0	0 ± 0	193 ± 193
Bidduphia obtusa	217 ± 217	0 ± 0	0 ± 0	0 ± 0
Cocconeis placentula var. *lineata*	1908 ± 905	2856 ± 681	4757 ± 1677	2314 ± 1582
Coscinodiscus argus	0 ± 0	118 ± 118	1117 ± 710	0 ± 0
Coscinodiscus oculus-iridis	877 ± 424	644 ± 328	409 ± 259	998 ± 465
Coscinodiscus radiatus	380 ± 244	152 ± 152	1610 ± 434	741 ± 475
Coscinodiscus sp.	2265 ± 325	1627 ± 518	3379 ± 1232	3357 ± 1321
Coscinodiscus subtilis var. subtilis	1225 ± 294	874 ± 405	402 ± 402	512 ± 338
Cyclotella meneghiniana	1052 ± 364	2185 ± 377	1800 ± 885	973 ± 508
Cyclotella plitvicensis	0 ± 0	206 ± 206	426 ± 269	778 ± 362
Cyclotella sp.1	498 ± 498	0 ± 0	1050 ± 664	266 ± 266
Cyclotella sp.2	289 ± 289	320 ± 320	816 ± 607	319 ± 319
Cyclotella stylorum	1950 ± 924	655 ± 332	1457 ± 530	1219 ± 567
Cymbella affinis	1358 ± 634	236 ± 236	782 ± 530	1972 ± 690
Delphineis surirella	1343 ± 485	206 ± 206	1385 ± 675	834 ± 549
Diatoma mesodon	289 ± 289	0 ± 0	0 ± 0	0 ± 0
Diatoma vulgare	0 ± 0	0 ± 0	514 ± 514	0 ± 0
Diploneis aestuarii	3136 ± 557	3335 ± 1019	3706 ± 461	3703 ± 857
Diploneis bombus	865 ± 391	0 ± 0	916 ± 586	257 ± 257
Diploneis sp.	206 ± 206	0 ± 0	0 ± 0	0 ± 0
Encynema sp.	910 ± 732	463 ± 318	0 ± 0	0 ± 0
Entomoneis sp.1	0 ± 0	0 ± 0	0 ± 0	257 ± 257
Entomoneis sp.2	1711 ± 1243	1660 ± 934	1899 ± 817	1339 ± 611
Epithemia sp.	0 ± 0	0 ± 0	307 ± 307	0 ± 0
Eunotia praerupta	350 ± 350	0 ± 0	0 ± 0	0 ± 0

Eunotia sp.	0 ± 0	206 ± 206	201 ± 201	220 ± 220
Frustulia interposita	163 ± 163	0 ± 0	0 ± 0	0 ± 0
Gomphonema sp.1	0 ± 0	0 ± 0	268 ± 268	539 ± 349
Gomphonema sp.2	327 ± 327	0 ± 0	201 ± 201	257 ± 257
Gomphonema sp.3	327 ± 327	118 ± 118	0 ± 0	266 ± 266
Gomphonema sp.4	289 ± 289	434 ± 434	201 ± 201	0 ± 0
Gyrosigma acuminatum	10299 ± 1396	4809 ± 1716	8115 ± 2077	10216 ± 3831
Gyrosigma balticum var. sinensis	206 ± 206	0 ± 0	208 ± 208	0 ± 0
Gyrosigma fasciola var. arcuata	1225 ± 294	1203 ± 396	1267 ± 630	1382 ± 807
Gyrosigma sp.1	0 ± 0	788 ± 502	217 ± 217	385 ± 385
Gyrosigma sp.2	31067 ± 7085	38105 ± 5645	53990 ± 10107	64604 ± 5516
Gyrosigma strigilis	163 ± 163	509 ± 331	201 ± 201	539 ± 349
Hantzschia amphioxys	0 ± 0	0 ± 0	0 ± 0	257 ± 257
Lemnicola sp.	0 ± 0	0 ± 0	0 ± 0	578 ± 578
Loticola sp.	0 ± 0	0 ± 0	208 ± 208	0 ± 0
Melosira nummuloides	1526 ± 769	526 ± 345	268 ± 268	1366 ± 638
Navicula granulate	1011 ± 522	632 ± 400	0 ± 0	954 ± 606
Navicula rhynchocephala	4054 ± 899	2572 ± 847	9631 ± 1721	7080 ± 2401
Navicula salinarum	13497 ± 1845	9052 ± 3331	19623 ± 3869	13608 ± 1548
Navicula sp.1	28650 ± 8588	24560 ± 2376	41439 ± 7694	61687 ± 16107
Navicula sp.2	163 ± 163	373 ± 240	208 ± 208	450 ± 289
Navicula sp.3	10011 ± 1932	6447 ± 1420	18248 ± 5057	7465 ± 1961
Navicula sp.4	4824 ± 1406	1789 ± 455	3915 ± 2676	3670 ± 1833
Nitzschia granulata	0 ± 0	152 ± 152	268 ± 268	0 ± 0
Nitzschia lorenziana	27900 ± 6664	10703 ± 3053	30165 ± 12383	8123 ± 1047
Nitzschia pararostrata	0 ± 0	0 ± 0	0 ± 0	1687 ± 1687
Nitzschia sigma	20021 ± 5027	12305 ± 2919	28959 ± 5629	21644 ± 3177
Nitzschia sigmoidea	4860 ± 1047	2131 ± 736	5595 ± 1189	4368 ± 2010
Nitzschia sp.1	9114 ± 2550	3666 ± 789	13766 ± 3752	11486 ± 2398
Nitzschia sp.2	206 ± 206	0 ± 0	0 ± 0	0 ± 0
Nitzschia sp.3	4617 ± 1843	2527 ± 1176	217 ± 217	0 ± 0
Nitzschia sp.4	4120 ± 1358	2554 ± 525	1555 ± 630	1810 ± 1282
Nitzschia tubicola	16026 ± 3398	7983 ± 2271	33435 ± 13890	11316 ± 2235
Paralia thybergii	2096 ± 747	3186 ± 995	4223 ± 779	1859 ± 882
Pinnularia flexuosa	0 ± 0	571 ± 376	0 ± 0	0 ± 0
Pleurosigma angulatum	1849 ± 790	1413 ± 591	1808 ± 1154	1510 ± 609
Pleurosigma delicatulum	931 ± 591	821 ± 378	843 ± 562	1326 ± 660
Rhaphoneis rhomoides	7783 ± 1300	7110 ± 1686	6213 ± 1874	5646 ± 1383
Skeletonema costatum	25892 ± 4472	17941 ± 2730	23264 ± 7282	22453 ± 4891
Stauroneis sp.	433 ± 433	0 ± 0	0 ± 0	0 ± 0
Surirella fluminensis	327 ± 327	217 ± 217	0 ± 0	577 ± 368
Surirella robusta	58039 ± 8592	58528 ± 14630	60289 ± 11412	85371 ± 16725
Surirella sp.1	350 ± 350	118 ± 118	0 ± 0	614 ± 427
Surirella sp.2	21895 ± 4402	15422 ± 4193	25647 ± 5972	11268 ± 3025
Tabularia tabulate	2612 ± 869	2270 ± 795	5472 ± 1355	3253 ± 625
Thalassisira eccentrica	513 ± 355	152 ± 152	0 ± 0	0 ± 0
Triceatium favus	0 ± 0	0 ± 0	307 ± 307	450 ± 289
Tryblionella levidensis	23913 ± 3083	17045 ± 2852	20541 ± 3089	16688 ± 2698
Tryblionella victoriae	2785 ± 679	304 ± 304	723 ± 515	0 ± 0
Tryblionella sp.	350 ± 350	217 ± 217	0 ± 0	679 ± 448
Tryblionella apiculata	11886 ± 1871	10902 ± 1794	14565 ± 3366	11959 ± 2985
Trybliоptychus cocconeiformis	5152 ± 1617	3980 ± 1200	6633 ± 1332	6148 ± 1008
Pennatae spp. (<12 m)	43140 ± 3831	43573 ± 6622	57654 ± 11584	58567 ± 8393
Centricae spp. (<12 m)	21303 ± 3806	16181 ± 5485	22784 ± 4891	22106 ± 2566

Table S2. Relative intensity (%) of bacterial operational taxonomic units (OTU). Mean ± SE, n = 6. –Nutrient: natural nutrient amounts; +Nutrient: nutrient added; –Snail: without snail; +Snail: with snail

OTU number	–Nutrient/–Snail	–Nutrient/+Snail	+Nutrient/–Snail	+Nutrient/+Snail
1	6.47 ± 0.65	4.94 ± 0.28	7.06 ± 0.59	7.58 ± 0.57
2	9.47 ± 1.62	4.25 ± 0.12	6.26 ± 0.54	5.13 ± 1.18
3	8.62 ± 0.97	3.92 ± 0.12	5.30 ± 0.79	4.31 ± 1.59
4	5.71 ± 1.32	5.62 ± 0.77	4.19 ± 0.58	5.67 ± 1.17
5	3.43 ± 0.66	2.66 ± 0.34	5.96 ± 0.68	4.81 ± 0.25
6	2.71 ± 0.75	3.03 ± 0.10	6.90 ± 1.14	2.98 ± 0.23
7	4.07 ± 0.53	4.23 ± 1.03	2.48 ± 0.69	4.49 ± 0.64
8	2.03 ± 0.64	3.43 ± 0.21	3.50 ± 0.35	5.61 ± 0.97
9	4.35 ± 0.57	0.76 ± 0.49	5.31 ± 0.35	3.87 ± 0.68
10	4.19 ± 0.58	4.26 ± 0.89	2.52 ± 0.52	3.24 ± 0.70
11	5.05 ± 0.24	1.23 ± 0.55	2.92 ± 0.93	4.48 ± 0.39
12	2.53 ± 0.42	1.88 ± 0.40	5.70 ± 1.64	2.55 ± 0.83
13	3.00 ± 0.30	4.28 ± 0.50	1.24 ± 0.81	3.52 ± 0.25
14	1.75 ± 0.14	0.85 ± 0.41	5.07 ± 0.29	4.07 ± 0.44
15	1.30 ± 0.29	4.14 ± 0.15	4.40 ± 1.16	1.89 ± 0.68
16	1.47 ± 0.62	2.33 ± 0.11	4.82 ± 0.62	2.78 ± 0.26
17	3.44 ± 0.72	2.81 ± 0.12	2.79 ± 0.95	2.07 ± 0.72
18	1.13 ± 0.59	3.50 ± 0.30	3.20 ± 0.80	1.33 ± 0.63
19	4.85 ± 0.61	3.85 ± 0.15	0.00 ± 0.00	0.00 ± 0.00
20	2.40 ± 0.33	2.95 ± 0.19	0.69 ± 0.51	2.51 ± 0.52
21	0.85 ± 0.55	3.56 ± 0.28	1.76 ± 0.81	2.02 ± 0.46
22	2.27 ± 0.54	1.46 ± 0.31	2.40 ± 1.21	1.33 ± 0.61
23	1.72 ± 0.82	1.50 ± 0.48	1.35 ± 0.23	2.88 ± 0.49
24	2.80 ± 0.36	1.21 ± 0.40	1.53 ± 0.75	1.79 ± 0.41
25	0.57 ± 0.38	0.94 ± 0.43	1.65 ± 0.41	3.82 ± 0.64
26	1.06 ± 0.34	2.01 ± 0.45	1.13 ± 0.73	2.43 ± 0.65
27	3.78 ± 0.83	1.87 ± 0.61	0.42 ± 0.42	0.00 ± 0.00
28	0.39 ± 0.25	2.97 ± 0.09	2.14 ± 1.14	0.51 ± 0.51
29	1.86 ± 0.70	0.00 ± 0.00	1.34 ± 0.68	2.80 ± 0.22
30	0.45 ± 0.45	4.10 ± 0.61	0.47 ± 0.43	1.04 ± 0.71
31	0.89 ± 0.11	2.30 ± 0.53	0.50 ± 0.20	1.74 ± 0.57
32	1.84 ± 0.88	0.75 ± 0.47	1.36 ± 0.33	1.48 ± 0.48
33	0.93 ± 0.32	1.02 ± 0.46	1.19 ± 0.54	1.67 ± 0.36
34	0.13 ± 0.13	1.35 ± 0.43	1.08 ± 0.49	1.42 ± 0.46
35	0.49 ± 0.39	1.59 ± 0.82	0.45 ± 0.29	0.36 ± 0.36
36	0.00 ± 0.00	1.79 ± 0.13	0.37 ± 0.37	0.70 ± 0.70
37	0.00 ± 0.00	2.11 ± 0.16	0.47 ± 0.47	0.28 ± 0.28
38	0.60 ± 0.38	1.76 ± 0.93	0.16 ± 0.16	0.33 ± 0.33
39	0.37 ± 0.26	2.24 ± 0.48	0.00 ± 0.00	0.00 ± 0.00
40	1.03 ± 0.41	0.55 ± 0.35	0.00 ± 0.00	0.52 ± 0.52

Table S3. Nematode composition in the study (ind. g^{-1} dry soil). Mean ± SE, n = 6. –Nutrient: natural nutrient amounts; +Nutrient: nutrient added; –Snail: without snail; +Snail: with snail

Species name	–Nutrient/–Snail	–Nutrient/+Snail	+Nutrient/–Snail	+Nutrient/+Snail
Adoncholaimus sp.	4.3 ± 2.4	1.6 ± 0.6	0.6 ± 0.3	0.5 ± 0.2
Amphidelus sp.	0.3 ± 0.3	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0
Anoplostoma sp.	0.0 ± 0.0	0.5 ± 0.2	0.0 ± 0.0	0.0 ± 0.0
Criconemoides sp.	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0
Daptonema sp.1	2.3 ± 0.4	4.8 ± 1.1	3.2 ± 2.8	1.4 ± 0.9
Daptonema sp.2	3.4 ± 1.9	0.6 ± 0.4	0.8 ± 0.6	0.2 ± 0.1
Daptonema sp.3	6.0 ± 2.4	5.1 ± 1.2	2.0 ± 1.0	2.0 ± 0.8
Diplolaimella sp.1	4.3 ± 2.7	4.6 ± 2.1	5.1 ± 3.4	3.8 ± 1.9
Diplolaimella sp.2	0.1 ± 0.1	0.5 ± 0.4	0.0 ± 0.0	0.0 ± 0.0
Diplolaimella sp.3	0.5 ± 0.2	0.9 ± 0.9	0.8 ± 0.2	1.0 ± 0.3
Diplolaimelloides sp.	0.1 ± 0.1	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0
Dolichodorus sp.	2.3 ± 1.1	1.9 ± 0.5	0.8 ± 0.3	0.4 ± 0.2
Dorylaimus sp.	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	0.2 ± 0.1
Eucephalobus sp.	0.2 ± 0.1	0.2 ± 0.1	0.0 ± 0.0	0.1 ± 0.1
Halalaimus sp.	0.3 ± 0.2	0.4 ± 0.3	0.1 ± 0.0	0.3 ± 0.2
Hirschmanniella sp.	0.0 ± 0.0	0.0 ± 0.0	0.1 ± 0.1	0.0 ± 0.0
Hypodontolaimus sp.	36.7 ± 17.9	18.6 ± 3.9	20.3 ± 7.7	14.5 ± 3.3
Labronema sp.	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0
Leptolaimus sp.	1.4 ± 0.8	0.7 ± 0.4	0.1 ± 0.1	0.3 ± 0.1
Metalinhomoeus sp.	0.1 ± 0.1	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0
Nygolaimus sp.	0.2 ± 0.1	0.1 ± 0.1	0.3 ± 0.1	0.1 ± 0.1
Panagrolaimus sp.	0.0 ± 0.0	0.1 ± 0.1	0.0 ± 0.0	0.1 ± 0.1
Parodontophora sp.	0.5 ± 0.2	0.1 ± 0.1	0.0 ± 0.0	0.0 ± 0.0
Polysigma sp.	1.5 ± 0.5	1.5 ± 0.5	0.7 ± 0.4	1.0 ± 0.4
Prodorylaimium sp.1	0.6 ± 0.3	0.1 ± 0.1	0.0 ± 0.0	0.0 ± 0.0
Prodorylaimium sp.2	0.2 ± 0.2	0.2 ± 0.1	0.3 ± 0.1	0.2 ± 0.1
Rhabditis sp.	0.1 ± 0.1	0.0 ± 0.0	0.2 ± 0.1	0.1 ± 0.1
Rhabdolaimus sp.	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0
Sphaerolaimus sp.	1.7 ± 0.8	1.9 ± 1.0	0.3 ± 0.2	0.3 ± 0.1
Thalassomonhystera sp.	0.0 ± 0.0	0.1 ± 0.1	0.0 ± 0.0	0.0 ± 0.0
Theristus sp.	3.2 ± 1.6	0.0 ± 0.0	0.0 ± 0.0	0.0 ± 0.0
Tylenchus sp.	0.7 ± 0.2	1.3 ± 0.5	0.8 ± 0.5	1.0 ± 0.3