Supplementary Material to:

Diversity, habitats and size-frequency distribution of the gastropod genus *Conus* at Dahab in the Gulf of Aqaba, Northern Red Sea

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Table S1. Overview of habitat types and sampling stations.

Habitat type & Sampling station	No. of transects	Sampled area [m²]	Number of transects per sampling depth [m]	Coordinates
<i>Subtidal reef</i>				
Moray Garden	9	45	3 x 5, 3 x 10, 3 x 15	28°26.262' N 34°27.534' E
Islands South	9	45	3 x 5, 3 x 10, 3 x 15	28°28.655' N 34°30.731' E
Abu Helal	6	30	3 x 5, 3 x 10	28°32.542' N 34°30.998' E
Lighthouse	9	45	3 x 5, 3 x 10, 3 x 15	28°29.944' N 34°31.182' E
<i>Reef flat</i>				
The Islands	4	20	< 1	28°28.655' N 34°30.731' E
<i>Subtidal sand</i>				
Coral Garden	3	3.75	5, 8, 9	28°33.294' N 34°31.257' E
Golden Blocks	3	3.75	4, 5, 4	28°26.342' N 34°27.812' E
Moray Garden	3	3.75	6, 5, 5	28°26.262' N 34°27.534' E
<i>Seagrass meadow</i>				
Bannerfish Bay	6	7.5	4, 3, 4, 9, 8, 8	28°29.934' N 34°31.125' E
Mashraba	6	7.5	8, 7, 6, 7, 3, 3	28°29.712' N 34°31.021' E
Lighthouse	6	7.5	5, 6, 7, 4, 5, 4	28°29.944' N 34°31.182' E
<i>Intertidal sand</i>				
Dahab Lagoon	9	11.25	< 1	28°28.593' N 34°30.391' E

Table S2. Basic data on sampling locations. Moray Garden (MG), The Islands (IS), Abu Helal (AH), Lighthouse (LH), Golden Blocks (GB), Coral Garden (CG), Bannerfish Bay (BB), Mashraba (MS).

Transect No.	Sampling location	Depth [m]	Habitat type	No. of species	Population density	
					<i>Mean</i>	<i>SD</i>
1	MG	5	Subtidal reef (Coral carpet)	1	0.2	0.4
2	MG	5	Subtidal reef (Coral carpet)	0	0.0	0.0
3	MG	5	Subtidal reef (Coral carpet)	0	0.2	0.4
4	MG	10	Subtidal reef (Coral carpet)	1	0.2	0.4
5	MG	10	Subtidal reef (Coral carpet)	0	0.0	0.0
6	MG	10	Subtidal reef (Coral carpet)	0	0.0	0.0
7	MG	15	Subtidal reef (Coral carpet)	0	0.0	0.0
8	MG	15	Subtidal reef (Coral carpet)	1	0.2	0.4
9	MG	15	Subtidal reef (Coral carpet)	0	0.0	0.0
10	IS	5	Subtidal reef (Reef slope)	1	0.2	0.4
11	IS	5	Subtidal reef (Reef slope)	2	0.4	0.9
12	IS	5	Subtidal reef (Reef slope)	0	0.0	0.0
13	IS	10	Subtidal reef (Patch reef)	0	0.0	0.0
14	IS	10	Subtidal reef (Patch reef)	0	0.0	0.0
15	IS	10	Subtidal reef (Patch reef)	0	0.0	0.0
16	IS	15	Subtidal reef (Patch reef)	1	0.2	0.4
17	IS	15	Subtidal reef (Patch reef)	0	0.0	0.0
18	IS	15	Subtidal reef (Patch reef)	0	0.4	0.9
19	AH	5	Subtidal reef (Coral carpet)	1	0.2	0.4
20	AH	5	Subtidal reef (Coral carpet)	1	0.2	0.4
21	AH	5	Subtidal reef (Coral carpet)	0	0.0	0.0
22	AH	10	Subtidal reef (Coral carpet)	0	0.0	0.0
23	AH	10	Subtidal reef (Coral carpet)	1	0.2	0.4
24	AH	10	Subtidal reef (Coral carpet)	0	0.0	0.0
25	LH	5	Subtidal reef (Reef slope)	1	0.2	0.4
26	LH	5	Subtidal reef (Reef slope)	3	0.7	0.5
27	LH	5	Subtidal reef (Reef slope)	2	0.8	0.4
28	LH	10	Subtidal reef (Coral patches)	0	0.0	0.0
29	LH	10	Subtidal reef (Coral patches)	0	0.0	0.0
30	LH	10	Subtidal reef (Coral patches)	0	0.0	0.0
31	LH	15	Subtidal reef (Coral patches)	0	0.0	0.0
32	LH	15	Subtidal reef (Coral patches)	0	0.0	0.0
33	LH	15	Subtidal reef (Coral patches)	0	0.0	0.0
34	IS	< 1	Reef flat	4	4.0	5.4
35	IS	< 1	Reef flat	2	2.8	1.6
36	IS	< 1	Reef flat	3	4.6	2.1
37	IS	< 1	Reef flat	5	13.2	5.5
38	GB	4	Subtidal sand	3	8.0	8.5
39	GB	5	Subtidal sand	2	2.2	3.2
40	GB	4	Subtidal sand	2	1.6	2.2
41	CG	9	Subtidal sand	1	2.4	3.6
42	CG	8	Subtidal sand	1	0.8	1.8
43	CG	5	Subtidal sand	2	2.4	3.6

Transect No.	Sampling location	Depth [m]	Habitat type	No. of species	Population density	
					<i>Mean</i>	<i>SD</i>
44	MG	6	Subtidal sand	0	0.0	0.0
45	MG	5	Subtidal sand	0	0.0	0.0
46	MG	5	Subtidal sand	2	1.6	3.6
47	BB	4	Seagrass meadow	0	0.0	0.0
48	BB	3	Seagrass meadow	1	0.8	1.8
49	BB	4	Seagrass meadow	1	0.8	1.8
50	BB	9	Seagrass meadow	0	0.0	0.0
51	BB	8	Seagrass meadow	0	0.0	0.0
52	BB	8	Seagrass meadow	0	0.0	0.0
53	MS	8	Seagrass meadow	0	0.0	0.0
54	MS	7	Seagrass meadow	0	0.0	0.0
55	MS	6	Seagrass meadow	0	0.0	0.0
56	MS	7	Seagrass meadow	0	0.0	0.0
57	MS	3	Seagrass meadow	0	0.0	0.0
58	MS	3	Seagrass meadow	2	1.6	2.2
59	LH	5	Seagrass meadow	0	0.0	0.0
60	LH	6	Seagrass meadow	2	1.6	2.2
61	LH	7	Seagrass meadow	0	0.0	0.0
62	LH	4	Seagrass meadow	0	0.0	0.0
63	LH	5	Seagrass meadow	1	0.8	1.8
64	LH	4	Seagrass meadow	0	0.0	0.0
65	Lagoon	< 0.5	Intertidal sand	1	1.6	3.6
66	Lagoon	< 0.5	Intertidal sand	0	0.0	0.0
67	Lagoon	< 0.5	Intertidal sand	0	0.0	0.0
68	Lagoon	< 0.5	Intertidal sand	0	0.0	0.0
69	Lagoon	< 0.5	Intertidal sand	0	0.0	0.0
70	Lagoon	< 0.5	Intertidal sand	0	0.0	0.0
71	Lagoon	< 0.5	Intertidal sand	0	0.0	0.0
72	Lagoon	< 0.5	Intertidal sand	0	0.0	0.0
73	Lagoon	< 0.5	Intertidal sand	2	1.6	2.2

Table S3. Feeding ecology of the *Conus* species found at Dahab.

Species	Description	Feeding mode
<i>Conus arenatus</i>	Hwass in Bruguière, 1792	vermivorous
<i>Conus tessulatus</i>	Born, 1778	vermivorous, piscivorous
<i>Conus parvatus</i>	Walls, 1979	vermivorous
<i>Conus miliaris</i>	Hwass in Bruguière, 1792	vermivorous
<i>Conus textile</i>	Linnaeus, 1758	molluscivorous
<i>Conus nigropunctatus</i> (syn. <i>C.catus</i>)	Sowerby II, 1857 (Hwass in Bruguière, 1792)	piscivorous
<i>Conus taeniatus</i>	Hwass in Bruguière, 1792	vermivorous
<i>Conus flavidus</i>	Lamarck, 1810	vermivorous
<i>Conus maldivus</i>	Hwass in Bruguière, 1792	vermivorous

Table S4. Statistical output of Kruskal-Wallis one-way Analysis of Variance on ranks comparing shell lengths among habitat types.

Group	Sample size	Median	Percentiles		H	df	p-value
			25%	75%			
Subtidal reef	20	15.5	12	24.75	38.936	4	< 0.001
Reef flat	120	11	10	13			
Subtidal sand	24	12	8	14			
Seagrass	7	24	16	43			
Intertidal sand	4	44	28.75	54			

Table S5. Statistical output of Kruskal-Wallis one-way Analysis of Variance on ranks comparing shell lengths among species.

Group	Sample size	Median	Percentiles		H	df	p-value
			25%	75%			
<i>C. parvatus</i>	98	11	10	12	50.514	6	< 0.001
<i>C. arenatus</i>	6	18	7.5	34.5			
<i>C. tessulatus</i>	21	12	8.5	15			
<i>C. taeniatus</i>	21	12	11	13			
<i>C. miliaris</i>	5	13	12	20.5			
<i>C. generalis</i>	5	34	28.5	40			
<i>C. flavidus</i>	12	27	24.25	30.25			

Table S6. Statistical output of Pairwise multiple comparison (Dunn's Method). Compared were shell lengths among habitat types. Note that bold p-values indicate significant differences among groups.

Habitat	Diff. of ranks	Q	p-value	P<0,050
Intertidal sand vs Subtidal sand	90.833	3.32	0.009	Yes
Intertidal sand vs Reef flat	89.375	3.471	0.005	Yes
Intertidal sand vs Subtidal reef	39.775	1.433	1	No
Intertidal sand vs Seagrass	17.786	0.56	1	Do Not Test
Seagrass vs Subtidal sand	73.048	3.357	0.008	Yes
Seagrass vs Reef flat	71.589	3.634	0.003	Yes
Seagrass vs Subtidal reef	21.989	0.988	1	Do Not Test
Subtidal reef vs Subtidal sand	51.058	3.329	0.009	Yes
Subtidal reef vs Reef flat	49.6	4.054	<0.001	Yes
Reef flat vs Subtidal sand	1.458	0.129	1	No

Table S7. Mean shell size (with standard deviation) of all species in the respective habitats.

Species per habitat type	Mean shell length [mm]	Sample size (n)
Subtidal reef		20
<i>C. parvatus</i>	13 ± 1.8	7
<i>C. taeniatus</i>	12.5 ± 0.7	2
<i>C. tessulatus</i>	11	1
<i>C. miliaris</i>	24	1
<i>C. flavidus</i>	26.7 ± 1.5	3
<i>C. maldivus</i>	35	1
<i>C. arenatus</i>		
unidentifiable	18.2 ± 5	5
Reef flat		120
<i>C. parvatus</i>	10.8 ± 1.6	87
<i>C. taeniatus</i>	12.6 ± 2.8	19
<i>C. miliaris</i>	13.5 ± 2.4	4
<i>C. flavidus</i>	26.9 ± 5.2	9
<i>C. nigropunctatus syn. catus</i>	33	1
<i>C. arenatus</i>		
<i>C. tessulatus</i>		
Subtidal sand		24
<i>C. parvatus</i>	14	1
<i>C. arenatus</i>	8.7 ± 3.1	3
<i>C. maldivus</i>	30.3 ± 3.2	3
<i>C. tessulatus</i>	12.5 ± 8.8	17
<i>C. textile</i>		
Seagrass meadow		7
<i>C. parvatus</i>	15.3 ± 3	3
<i>C. arenatus</i>	32.7 ± 9.5	3
<i>C. textile</i>	75	1
Intertidal sand		4
<i>C. tessulatus</i>	41.3 ± 16.6	3
<i>C. maldivus</i>	45	1

Table S8. Statistical output of Pairwise multiple comparison (Dunn's Method). Compared were shell lengths among species. *C. parvatus* and *C. tessulatus* were significantly (≤ 0.013) smaller than *C. maldivus* and *C. flavidus*. Note that bold p-values indicate significant differences among groups.

Species comparison	Diff. of ranks	Q	p-value	p<0.050
maldivus vs parvatus	91.416	4.099	<0.001	Yes
maldivus vs tessulatus	82.624	3.414	0.013	Yes
maldivus vs taeniatus	67.029	2.769	0.118	No
maldivus vs arenatus	64.183	2.179	0.616	Do Not Test
maldivus vs miliaris	40	1.3	1	Do Not Test
maldivus vs flavidus	8.183	0.316	1	Do Not Test
flavidus vs parvatus	83.233	5.595	<0.001	Yes
flavidus vs tessulatus	74.44	4.229	<0.001	Yes
flavidus vs taeniatus	58.845	3.343	0.017	Do Not Test
flavidus vs arenatus	56	2.303	0.447	Do Not Test
flavidus vs miliaris	31.817	1.229	1	Do Not Test
miliaris vs parvatus	51.416	2.306	0.444	No
miliaris vs tessulatus	42.624	1.761	1	Do Not Test
miliaris vs taeniatus	27.029	1.117	1	Do Not Test
miliaris vs arenatus	24.183	0.821	1	Do Not Test
arenatus vs parvatu	27.233	1.331	1	Do Not Test
arenatus vs tessulatus	18.44	0.819	1	Do Not Test
arenatus vs taeniatus	2.845	0.126	1	Do Not Test
taeniatus vs parvatus	24.388	2.085	0.778	Do Not Test
taeniatus vs tessulatus	15.595	1.039	1	Do Not Test
tessulatus vs parvatus	8.793	0.752	1	Do Not Test

Table S9. Statistical output of a Mann-Whitney rank sum test comparing shell lengths of different habitat types. ** indicate significant differences among groups ($p \leq 0.01$), * = $p \leq 0.05$.

Species	Habitat	Sample size	Median	Percentiles		U	T	P-value
				25%	75%			
<i>C. parvatus</i>	Subtidal reef	7	13	12	15	90	547	0.002**
	Reef flat	87	11	10	12			
<i>C. tessulatus</i>	Subtidal sand	17	10	8	12.5	2	55	0.012*
	Intertidal sand	3	43	24	57			

Table S10. Statistical output of a T-test comparing shell lengths of species in different habitat types. ** indicate significant differences among groups ($p \leq 0.01$).

Species	Habitat	Sample size	Mean	SD	df	p-value
<i>C. arenatus</i>	Subtidal sand	3	8.7	3.1	4	0.006**
	Seagrass	3	32.7	9.0		
<i>C. flavidus</i>	Reef flat	9	26.9	5.2	10	0.944
	Subtidal reef	3	26.7	1.5

Figure S1. A. *Conus textile*. B. *Conus miliaris*. C. *Conus taeniatus*. D. *Conus parvatus*. E. *Conus arenatus*. F. *Conus tessulatus*. G. *Conus nigropunctatus* syn. *catus*. H. *Conus flavidus*. *C. maldivus* and *C. rattus* not shown.

Figure S2. Microhabitat occupation summarised for all specimens. Sampling stations are listed in Table S1. Vertical columns indicate the number of individuals per species found on different substrates. Numbers in parentheses denote sample sizes.