

The following supplement accompanies the article

Implications of using different metrics for niche analysis in ecological communities

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Supplement.

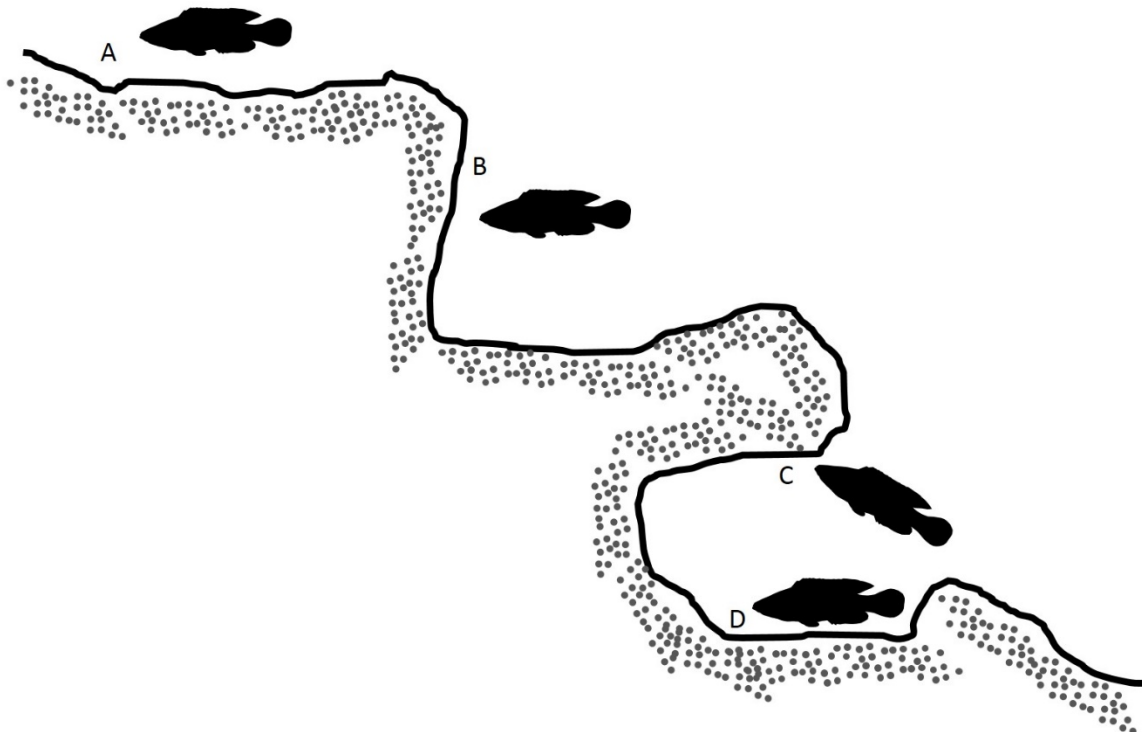


Fig. S1. Representation of microhabitat surface orientation, A: open horizontal, B: open vertical, C: underside or D: concealed.

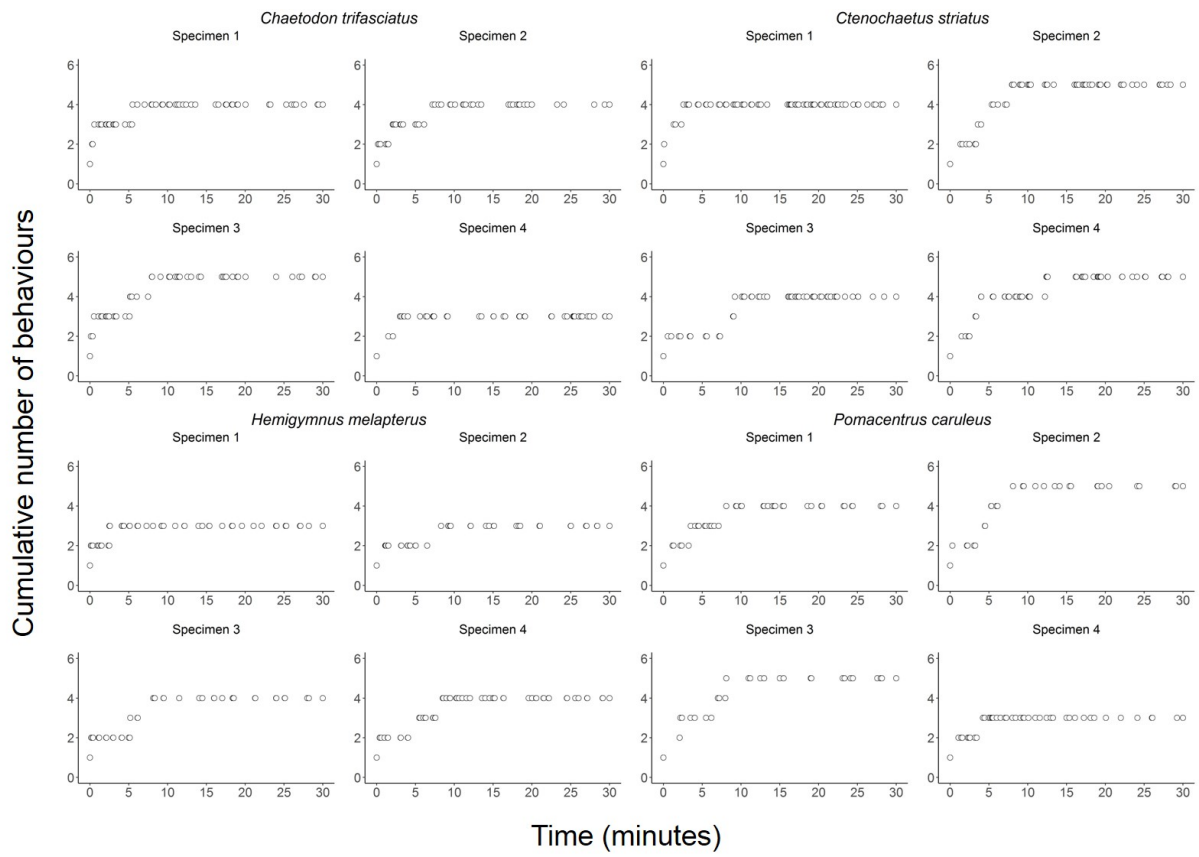


Fig. S2. Behavioural time budget in Seychelles, representing continual behavioural traits accumulated over time for all individuals (n=16) of each species sampled.

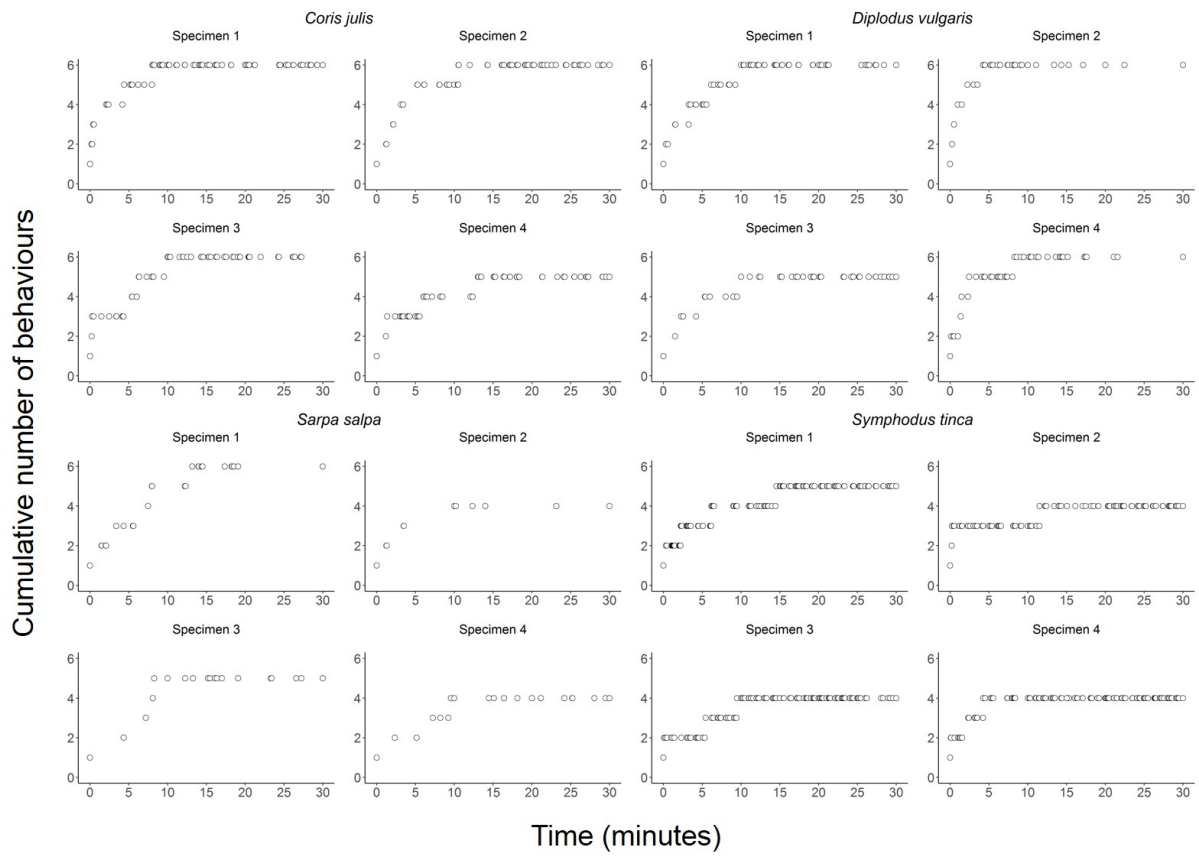


Fig. S3. Behavioural time budget in Mallorca, representing continual behavioural traits accumulated over time for all individuals (n=16) of each species sampled.

Table S1. Summary of species sampled, behaviour and its abbreviation, substratum type and its abbreviation. (S) Seychelles and (M) Mallorca correspond to the species and substrata encountered only in these locations.

Species	Behaviour	Ab.	Substratum type	Ab.
<i>Pomacentrus caeruleus</i> (S)	Intraspecific aggression	a	Rock	r
<i>Ctenochaetus striatus</i> (S)	Interspecific aggression	b	Rubble	rub
<i>Hemigymnus melapterus</i> (S)	Advertising	ad	Sand	s
<i>Chaetodon trifasciatus</i> (S)	Cleaning	c	Algae (S)	alg
<i>Symphodus tinca</i> (M)	Diffused feeding	df	Branching coral (S)	b
<i>Coris julis</i> (M)	Focused feeding	f	Massive coral (S)	m
<i>Sarpa salpa</i> (M)	Water column feeding	wc	Seagrass (M)	p
<i>Diplodus vulgaris</i> (M)	Hovering	h	Erect algae (M)	et
	Searching	s	Filamentous algae (M)	fl
	Roaming	rm	Turf algae (M)	tf
	Rubbing	rb		

Table S2. Total number of individuals sampled per species and their distribution across sites for Seychelles and Mallorca.

Seychelles					
Site	Species				Total/site
	<i>C.trifasciatus</i>	<i>C.striatus</i>	<i>H.melapterus</i>	<i>P.caruleus</i>	
Baie Laraie	5	5	5	5	20
East Bay	7	5	5	6	23
Home Reef	6	5	5	7	23
Point Rouge	6	7	5	7	25
Praslin 1	5	5	5	5	20
Praslin 3	8	5	5	7	25
Praslin 4	5	5	5	5	20
Praslin 6	7	5	5	5	22
Total/species	49	42	40	47	178
Mallorca					
Site	Species				Total/site
	<i>C.julis</i>	<i>D.vulgaris</i>	<i>S.salpa</i>	<i>S.tinca</i>	
Cala Egos	10	10	10	10	40
Cala Llamp	9	10	10	10	39
Es Basc	10	9	10	10	39
Es Guix	10	10	10	10	40
Es Total	10	10	10	11	41
Malgrats Este	10	10	10	10	40
Malgrats Oeste	13	12	12	13	50
Rafaubeitx	10	11	9	9	39
Total/species	82	82	81	83	328

Table S3. The values of the surface areas of the realised niches represented by Convex Hulls and Ellipses for the Seychelles' and Mallorcan species.

Species	Convex Hull	Ellipse
Seychelles		
<i>C. trifasciatus</i>	0.51	0.17
<i>C. striatus</i>	0.92	0.34
<i>H. melapterus</i>	0.7	0.25
<i>P. caruleus</i>	0.07	0.01
Mallorca		
<i>C. julis</i>	0.87	0.28
<i>D. vulgaris</i>	0.93	0.28
<i>S. salpa</i>	1	0.26
<i>S. tinca</i>	0.77	0.23

Table S4. Sampling site habitat characteristics; percent \pm SE of benthic cover composition per 100m², for Seychelles and Mallorca.

Seychelles	Benthic Community (% cover)						
Site	Branching	Massive	Rubble	Rock	Sand	Algae	DC
Baie Laraie	7.2 \pm 1.6	48.2 \pm 8.1	22.6 \pm 3.7	3.7 \pm 0.4	10.7 \pm 6.2	7.3 \pm 4	0.3 \pm 0.3
East Bay	20.6 \pm 3.6	27.1 \pm 3.8	24.1 \pm 6.2	4.7 \pm 2.5	16.1 \pm 4.9	5.9 \pm 1.4	1.6 \pm 0.6
Home Reef	3.9 \pm 1.1	24.6 \pm 9.1	45.1 \pm 8.8	5.8 \pm 1.4	3.3 \pm 0.7	14.2 \pm 5.6	3.1 \pm 2.3
Point Rouge	2.3 \pm 1.2	9.3 \pm 1.3	42.1 \pm 13	36.7 \pm 10.5	9 \pm 2.6	1.7 \pm 1.3	0 \pm 0
PS1	22.4 \pm 1.9	12.3 \pm 4	12.2 \pm 4.1	45.2 \pm 2.8	2.6 \pm 1.5	0 \pm 0	5.3 \pm 2
PS3	16.6 \pm 5.8	17.4 \pm 2.6	15.1 \pm 8	4 \pm 1.7	0.2 \pm 0.2	40.3 \pm 14.8	6.3 \pm 3.2
PS4	49.4 \pm 1.4	19.2 \pm 3.8	22 \pm 2	4.2 \pm 2	2.1 \pm 0.4	1.3 \pm 1.2	1.7 \pm 0.5
PS6	20.8 \pm 2.2	11.3 \pm 1.1	23.8 \pm 5.3	36.3 \pm 4.3	0 \pm 0	3.7 \pm 0.9	4.1 \pm 1.5
Mallorca	Benthic Community (% cover)						
Station	Erect	Filament	Turf	Posidonia	Rubble	Rock	Sand
Cala Egos	43.6 \pm 8.8	8.2 \pm 2.2	25.9 \pm 1.9	5 \pm 2.2	14.1 \pm 6	3.1 \pm 1.6	0.2 \pm 0.2
Cala Llamp	64.8 \pm 2.2	11.5 \pm 1.6	12.5 \pm 2.5	9.3 \pm 2.9	1.8 \pm 1.3	0 \pm 0	0 \pm 0
Es Basc	51.5 \pm 7.7	8.1 \pm 2.4	18.4 \pm 5.9	6.7 \pm 4.1	1.1 \pm 0.6	3.6 \pm 2	10.6 \pm 9.3
Es Guix	49.8 \pm 3.5	17.3 \pm 1.8	31.5 \pm 1.8	0 \pm 0	1.3 \pm 1.1	0 \pm 0	0 \pm 0
Es Total	56.4 \pm 6.2	6.1 \pm 1.2	29.7 \pm 5.3	3.1 \pm 1.7	0.7 \pm 0.4	3.9 \pm 1.2	0 \pm 0
Malgrats Este	42.6 \pm 3.7	1 \pm 0.4	33.7 \pm 8.3	0 \pm 0	6.8 \pm 3.6	16 \pm 2.7	0 \pm 0
Malgrats Oeste	62 \pm 4.6	18.5 \pm 3.9	9.7 \pm 2	6.5 \pm 3	2.1 \pm 1.1	1.2 \pm 1.2	0 \pm 0
Rafaubeitx	66.1 \pm 5.9	8.1 \pm 2.7	17.9 \pm 3.7	0 \pm 0	4.2 \pm 2.3	1.5 \pm 0.9	2.3 \pm 2.3