

Table S1. Comparative results of PERMANOVA for parrotfish species composition among depth, complexity and site at Arraial do Cabo.

	df	Sum OfSqs	MeanSq s	F. Model	R2	Pr(>F)
Complexity	1	0.166	0.165	0.661	0.008	0.581
Depth	1	0.792	0.792	0.036	0.036	0.034
Site	4	3.743	0.936	3.738	0.171	0.001
Complexity: Depth	1	0.217	0.217	0.868	0.010	0.486
Complexity: Site	2	0.472	0.236	0.942	0.022	0.467
Depth: Site	4	1.386	0.347	1.385	0.063	0.184
Complexity: Depth:Site	2	0.402	0.201	0.802	0.018	0.568
Residuals	59	14.769	0.250		0.673	
Total	74	21.947			1.000	

Table S2. Sleeping site area and sleeping hotspots data of 23 *Sparisoma axillare* and 18 *Sparisoma frondosum* tagged with a V9-2H continuous transmitter.

Fish_id	Number of nocturnal detections	TL (mm)	Phase (initial; IP or terminal; TP)	KUD9 5 (10 ³ m ²)	KUD5 0 (10 ³ m ²)	50:95 UD Ratio	Number of core areas
SA 01	149	360	IP	4.90	0.84	17.23	1
SA 02	502	450	TP	21.39	4.77	22.30	2
SA 03	1.422	375	TP	15.31	3.50	22.87	2
SA 04	376	444	TP	7.07	1.31	18.49	1
SA 05	286	489	TP	2.88	0.79	27.42	3
SA 06	101	312	IP	1.68	0.36	21.53	2
SA 07	132	432	IP	208.80	52.96	25.36	2
SA 08	139	400	IP	17.78	3.65	20.51	1
SA 09	278	500	TP	70.45	12.63	17.93	2
SA 10	63	403	TP	122.50	28.53	23.29	2
SA 11	250	410	IP	3.18	0.58	18.15	2
SA 12	558	412	IP	24.16	4.61	19.09	1
SA 13	215	400	IP	1.40	0.26	18.74	1
SA 14	242	379	IP	5.30	1.30	24.45	2
SA 15	159	420	IP	6.68	1.44	21.58	2

SA 16	178	400	IP	44.93	10.22	22.75	2
SA 17	61	370	TP	9.62	1.03	10.70	2
SA 18	263	390	IP	3.75	0.61	16.21	1
SA 19	533	420	IP	2.66	0.65	24.62	2
SA 20	844	400	IP	7.84	1.54	19.62	2
SA 21	547	370	IP	2.66	0.67	25.14	2
SA 22	974	470	IP	9.81	2.12	21.61	2
SA 23	1.129	370	TP	1.74	0.46	26.52	2
Mean				25.93 ±10.15	5.86 ± 2.56	21.14 ± 0.8	
SF 01	518	430	TP	3.14	0.55	17.40	1
SF 02	459	399	IP	11.78	1.91	16.24	1
SF 03	562	364	TP	4.13	0.89	21.53	1
SF 04	832	398	IP	4.28	0.81	18.80	2
SF 05	339	432	IP	1.40	0.24	17.12	1
SF 06	230	331	IP	5.88	1.23	20.90	2
SF 07	116	361	IP	1.51	0.27	17.96	1
SF 08	204	330	TP	0.060	0.01	24.93	1
SF 09	154	310	IP	70.38	11.50	16.34	1
SF 10	333	320	TP	3.19	0.58	18.10	1
SF 11	640	410	IP	0.39	0.09	21.77	2
SF 12	449	310	IP	0.98	0.21	21.66	2
SF 13	38	350	IP	1.40	0.23	16.66	1
SF 14	41	340	IP	9.29	1.56	16.79	1
SF 15	168	430	IP	0.58	0.16	27.14	2
SF 16	209	375	TP	5.04	0.88	17.51	1
SF 17	469	320	IP	14.85	2.76	18.60	2
SF 18	113	340	IP	8.40	2.27	27.09	2
Mean				8.15 ± 3.79	1.45 ± 0.62	19.81 ±0.83	