

Table S1. Mean percentual coverage and standard errors (\pm SE) of benthic taxa and groups in the study area.

Benthic group	Taxon	Mean %cover (\pm SE)
Articulated coralline algae (ACA)	<i>Amphiroa</i> spp	5.22 (\pm 0.93)
	<i>Jania</i> spp	0.28 (\pm 0.14)
Crustose coralline algae (CCA)	CCA	1.06 (\pm 0.24)
	<i>Dyctiopteris</i> sp1	6.17 (\pm 0.85)
Foliose brown algae	<i>Dyctiopteris</i> sp2	0.06 (\pm 0.06)
	<i>Dyctiota</i> sp1	0.44 (\pm 0.26)
	<i>Dyctiota</i> sp2	0.78 (\pm 0.36)
	<i>Sargassum</i> sp	0.06 (\pm 0.06)
Green macroalgae	<i>Caulerpa racemosa</i>	1.39 (\pm 0.42)
Red macroalgae	<i>Cryptonemia</i> sp	0.11 (\pm 0.08)
	<i>Laurencia</i> sp	7.11 (\pm 1.80)
Red algal mats	<i>Gelidium</i> spp	6.44 (\pm 0.57)
	<i>Gelidiella</i> spp	4.89 (\pm 0.61)
Turf	Turf	10.67 (\pm 1.07)
Hard coral	<i>Siderastrea</i> spp	3.72 (\pm 0.51)
	<i>Porites astreoides</i>	0.06 (\pm 0.06)
	<i>Favia gravida</i>	0.06 (\pm 0.06)
	<i>Millepora alcicornis</i>	0.11 (\pm 0.11)
Zoanthid	<i>Zoanthus</i> sp	0.22 (\pm 0.11)
	<i>Palythoa caribaeorum</i>	9.67 (\pm 1.29)
Sand	Sand	41.17 (\pm 2.74)
Bare rock	Bare Rock	0.33 (\pm 0.13)

Table S2. Pairwise differences between the abundance of *Sparisoma axillare* and *S. frondosum* and their life phases (J = juvenile, IP = initial phase, TP = terminal phase). Bold p-values indicate significant differences among groups. Differences are represented in Figure 2.

Species/life phase	Stat	p-value	p-adjust
<i>S. axillare</i> J – <i>S. axillare</i> IP	0.477	0.633	0.633
<i>S. axillare</i> J – <i>S. frondosum</i> J	-5.475	<0.001	<0.001
<i>S. axillare</i> J – <i>S. frondosum</i> IP	3.151	0.001	0.002
<i>S. axillare</i> J – <i>S. frondosum</i> TP	5.553	<0.001	<0.001
<i>S. axillare</i> IP – <i>S. frondosum</i> J	-5.980	<0.001	<0.001
<i>S. axillare</i> IP – <i>S. frondosum</i> IP	2.962	0.003	0.003
<i>S. axillare</i> IP – <i>S. frondosum</i> TP	5.717	<0.001	<0.001
<i>S. frondosum</i> J – <i>S. frondosum</i> IP	7.283	<0.001	<0.001
<i>S. frondosum</i> J – <i>S. frondosum</i> TP	8.403	0.000	0.000
<i>S. frondosum</i> IP – <i>S. frondosum</i> TP	3.048	0.002	0.002

Table S3. Pairwise differences between the feeding rate of *Sparisoma axillare* and *S. frondosum* and their life phases (J = juvenile, IP = initial phase, TP = terminal phase). Bold p-values indicate significant differences among groups. Differences are represented in Figure 2.

Species/life phase	Stat	p-value	p-adjust
<i>S. axillare</i> J – <i>S. axillare</i> IP	-4.966	<0.001	<0.001
<i>S. axillare</i> J – <i>S. frondosum</i> J	3.650	<0.001	<0.001
<i>S. axillare</i> J – <i>S. frondosum</i> IP	6.884	<0.001	<0.001
<i>S. axillare</i> J – <i>S. frondosum</i> TP	7.617	<0.001	<0.001
<i>S. axillare</i> IP – <i>S. frondosum</i> J	-1.567	0.117	0.117
<i>S. axillare</i> IP – <i>S. frondosum</i> IP	3.711	<0.001	<0.001
<i>S. axillare</i> IP – <i>S. frondosum</i> TP	5.533	<0.001	<0.001
<i>S. frondosum</i> J – <i>S. frondosum</i> IP	-4.82	<0.001	<0.001
<i>S. frondosum</i> J – <i>S. frondosum</i> TP	-6.294	<0.001	<0.001
<i>S. frondosum</i> IP – <i>S. frondosum</i> TP	2.209	0.02	0.02

Table S4. Mean percentage and standard errors (\pm SE) of bites taken by individuals of *S. axillare* and *S. frondosum* and their life phases (J = juvenile, IP = initial phase, TP = terminal phase) on different substrate types.

		Mean %bites (\pm SE)				
Benthic group	Benthic taxon	<i>S. axillare</i>		<i>S. frondosum</i>		
		J	IP	J	IP	TP
ACA	ACA	7.36 (\pm 2.33)	1.75 (\pm 1.06)	3.45 (\pm 1.42)	0.11 (\pm 0.11)	3.30 (\pm 1.88)
CCA	CCA	0 (\pm 0)	0.48 (\pm 0.34)	1.20 (\pm 1.06)	0.50 (\pm 0.50)	0 (\pm 0)
Foliose brown algae	<i>Dyctiopteris</i> spp;	3.02 (\pm 0.89)	11.8 (\pm 2.07)	13.7 (\pm 2.73)	6.76 (\pm 1.80)	4.43 (\pm 1.94)
	<i>Dyctiota</i> spp.	0.30 (\pm 0.22)	1.14 (\pm 0.84)	0.90 (\pm 0.66)	0.47 (\pm 0.47)	0.22 (\pm 0.22)
	Loose brown algae	0.15 (\pm 0.15)	10.9 (\pm 2.53)	2.08 (\pm 1.31)	13.4 (\pm 3.05)	14.6 (\pm 3.91)
Red macroalgae	<i>Cryptonemia</i> spp.	0 (\pm 0)	1.04 (\pm 0.78)	0.40 (\pm 0.40)	0 (\pm 0)	0 (\pm 0)
	<i>Laurencia</i> spp.	2.34 (\pm 1.07)	0.09 (\pm 0.09)	1.26 (\pm 1.07)	1.41 (\pm 0.79)	0 (\pm 0)
Red algal mats	<i>Gelidium</i> spp.	12.3 (\pm 3.43)	7.27 (\pm 2.08)	6.40 (\pm 1.88)	13.1 (\pm 2.91)	11.8 (\pm 3.64)
	<i>Gelidiella</i> spp.	3.61 (\pm 1.42)	4.30 (\pm 1.42)	0.95 (\pm 0.58)	2.49 (\pm 1.31)	9.49 (\pm 3.38)
Turf	Turf	60.6 (\pm 4.80)	44.2 (\pm 3.89)	48.2 (\pm 4.15)	24.9 (\pm 4.08)	25.6 (\pm 4.90)
Zoanthid	<i>Palythoa caribaeorum</i>	0.23 (\pm 0.23)	0 (\pm 0)	2.37 (\pm 1.40)	1.55 (\pm 1.22)	0 (\pm 0)
Hard coral	<i>Siderastrea</i> sp.	0.08 (\pm 0.08)	0 (\pm 0)	0.21 (\pm 0.21)	0 (\pm 0)	0 (\pm 0)
Sponge	Sponge	2.79 (\pm 1.98)	0 (\pm 0)	0 (\pm 0)	0 (\pm 0)	0 (\pm 0)
Sand	Sand	7.22 (\pm 2.98)	14 (\pm 2.93)	18.7 (\pm 3.61)	24.8 (\pm 4.16)	14 (\pm 3.92)

Table S5. Pairwise differences between the shoal size (number of fish per focal individual) of *Sparisoma axillare* and *S. frondosum* and their life phases (J = juvenile, IP = initial phase, TP = terminal phase). Bold p-values indicate significant differences among groups. Differences are represented in Figure 6.

Species/life phase	Stat	p-value	p-adjust
<i>S. axillare</i> J – <i>S. axillare</i> IP	-3.142	0.001	0.004
<i>S. axillare</i> J – <i>S. frondosum</i> J	-1.060	0.289	0.321
<i>S. axillare</i> J – <i>S. frondosum</i> IP	-2.203	0.027	0.034
<i>S. axillare</i> J – <i>S. frondosum</i> TP	-2.784	0.005	0.008
<i>S. axillare</i> IP – <i>S. frondosum</i> J	-4.252	>0.001	>0.001
<i>S. axillare</i> IP – <i>S. frondosum</i> IP	-3.073	0.002	0.004
<i>S. axillare</i> IP – <i>S. frondosum</i> TP	-3.735	>0.001	>0.001
<i>S. frondosum</i> J – <i>S. frondosum</i> IP	2.560	0.010	0.014
<i>S. frondosum</i> J – <i>S. frondosum</i> TP	3.307	>0.001	0.003
<i>S. frondosum</i> IP – <i>S. frondosum</i> TP	-0.975	0.329	0.329

Table S6. Pairwise differences between the number of fish chasing focal individuals of *Sparisoma axillare* and *S. frondosum* and their life phases (left), and between the number of fish chased by focal individuals (right) of *Sparisoma axillare* and *S. frondosum* and their life phases (J = juvenile, IP = initial phase, TP = terminal phase). The lack of differences is represented in Figure 7.

Species/life phase	N of chases against focal individuals			N of chases performed by focal individuals		
	Stat	p-value	p-adjust	Stat	p-value	p-adjust
<i>S. axillare</i> J – <i>S. axillare</i> IP	1.806	0.070	0.488	0.307	0.758	0.926
<i>S. axillare</i> J – <i>S. frondosum</i> J	1.063	0.287	0.624	0.982	0.326	0.652
<i>S. axillare</i> J – <i>S. frondosum</i> IP	0.760	0.446	0.624	-1.037	0.299	0.652
<i>S. axillare</i> J – <i>S. frondosum</i> TP	0.047	0.961	0.961	0.092	0.926	0.926
<i>S. axillare</i> IP – <i>S. frondosum</i> J	-0.776	0.437	0.624	0.610	0.541	0.773
<i>S. axillare</i> IP – <i>S. frondosum</i> IP	-1.057	0.290	0.624	-1.493	0.135	0.652
<i>S. axillare</i> IP – <i>S. frondosum</i> TP	-1.656	0.097	0.488	-0.186	0.852	0.926
<i>S. frondosum</i> J – <i>S. frondosum</i> IP	-0.296	0.767	0.852	-1.878	0.060	0.604
<i>S. frondosum</i> J – <i>S. frondosum</i> TP	-0.961	0.336	0.624	-0.739	0.459	0.766
<i>S. frondosum</i> IP – <i>S. frondosum</i> TP	-0.675	0.499	0.624	1.098	0.272	0.652