

Table S1. Description of tile community members

Benthic category	Description	Examples of taxa (if known) included in the benthic category
Bare substrate	No visible living organisms, colorless, bare tile substrate	
Calcareous invertebrates	Calcareous tube worms	Feather duster tubes (<i>Bispira</i> spp.)
Cyanobacteria	Very fine filamentous, green-brown filamentous cyanobacteria	
Fine green filamentous algae	Species of Chlorophyta (green algae) with cylindrical thallus, usually smaller than 150 µm in diameter.	<i>Cladophora</i> spp., <i>Enteromorpha</i> spp., <i>Derbesia</i> spp.
<i>Jania</i>	Red, upright, calcareous algae in the genus <i>Jania</i>	<i>Jania adhaerens</i> , <i>Jania capillacea</i>
Macroalgae	Upright macroalgae species with different morphologies (e.g., spherical, flat-corticated, parasol-shape)	<i>Acetabularia</i> spp., <i>Valonia</i> spp., <i>Dictyota</i> spp.
<i>Peyssonnelia</i>	Red, crustose non-calcareous macroalgae, in the genus <i>Peyssonnelia</i>	<i>Peyssonnelia</i> spp.
Fine red filamentous algae	Species of Rhodophyta (red algae) with cylindrical thallus, usually smaller than 150 µm in diameter.	<i>Polysiphonia</i> spp., <i>Herposiphonia</i> spp., <i>Lobosiphonia</i> spp., <i>Ceramium</i> spp., <i>Centroceras</i> spp., <i>Digenea simplex</i>
Thick red filamentous algae	Species of Rhodophyta (red algae) with cylindrical thallus, usually greater than 200 µm in diameter.	<i>Laurencia</i> spp., <i>Champia</i> spp., <i>Chondria</i> spp., <i>Hypnea</i> spp.
CCA	Red crustose calcareous macroalgae	<i>Mesophyllum</i> spp., <i>Porolithon</i> spp.
Sediment	Fine sediment accumulated on the tile's surface	

Benthic category	Description	Examples of taxa (if known) included in the benthic category
Sponges	Small (less than 1 cm diameter) sponge tissue	

Table S2. Sample sizes and results of compositional analysis of habitat use at different spatial scales for neighborhoods around coral settlers and randomly selected neighborhoods. Number of point IDs is the number of points used to characterize the community within each neighborhood. The number of settlers included in the analysis differs for different size neighborhoods because larger neighborhoods were more likely to be partially off the tile, and therefore were excluded from the analysis. The analysis of 1mm neighborhoods also had fewer settlers included in the analysis because based on where the neighborhood was located within the point grid, some neighborhoods had <3 points used to characterize the community that were located within that neighborhood. We excluded these settlers from the data analysis because we reasoned that it was not possible to characterize the benthic communities with <3 points. We recognize that 3 points is a small number of points to characterize a community. Given that we characterized the 1mm neighborhoods with a small number of points, and had a relatively small sample size for this analysis (n = 19 settlers), our significant results are strong evidence for habitat selection at these small spatial scales. The fact that randomly-chosen 1mm neighborhoods did not differ in composition from the whole tiles further suggests that the differences we saw for coral neighborhoods were reflective of the active choices that coral larvae were making.

Neighborhood radius (mm)	Number of point IDs	Number of settlers included in analysis	<i>P</i>-value for neighborhoods around settlers	Number of randomly selected neighborhoods included in analysis	<i>P</i>-value for randomly selected neighborhoods
1	3	19	0.004	19	>0.999
2	13	30	0.002	30	0.132
3	28	29	0.002	29	0.180
4	50	24	0.006	24	0.156
5	79	19	0.002	19	>0.999
6	113	17	0.026	17	>0.999

Table S3. Results of SIMPER analysis testing how benthic taxa contributed to the community dissimilarity between tiles with settlers (SET) and tiles with no settlers (NO SET)

Benthic category	Contribution to average dissimilarity	Standard deviation of contribution	Dissimilarity/SD ratio	Abundance on tiles with settlers	Abundance on tiles without settlers	Cumulative % contribution to dissimilarity
Bare substrate	13.05	9.42	1.39	36.47	14.22	25.55
Thick red fil.	9.06	5.78	1.57	10.56	25.69	43.24
CCA	8.55	5.47	1.56	10.07	21.32	59.95
Fine red fil.	5.51	3.93	1.40	10.06	14.87	70.74
<i>Jania</i>	4.05	4.54	0.89	7.31	4.75	78.65
Fine green fil.	3.75	2.51	1.50	14.67	8.27	85.97
<i>Peyssonnelia</i>	2.02	2.08	0.97	0.10	4.05	89.92
Sediment	1.41	1.26	1.12	3.68	2.65	92.69
Sponge	1.41	2.42	0.58	3.19	1.63	95.45
Macroalgae	1.17	1.46	0.81	1.60	1.42	97.74
Calcareous invert.	0.62	1.39	0.45	1.25	0.05	98.95
Unidentifiable	0.54	0.53	1.01	1.04	1.07	100.00